# CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report/Environmental Impact Statement




FINAL

## Merced to Fresno Section Project EIR/EIS

# Volume III:

# Section J1 – Roadway and Grade Separation Plans

BNSF Alternative with Ave 21 Wye

April 2012

CALIFORNIA High-Speed Rail Authority

U.S. Department of Transportation
Federal Railroad Administration

| LOCATION NO. | SHT NO. | DWG NO. | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | DRAWING TITLE LINE 5 | DRAWING TITLE LINE 6 |
|---|---|---|---|---|---|---|
| A1 - AVE 21 WYE (GENERAL) | | | | | | |
| | | B0110-A | BNSF - AVE 21 WYE | GENERAL | INDEX OF DRAWINGS | SHEET 1 OF 5 |
| | | B0111-A | BNSF - AVE 21 WYE | GENERAL | INDEX OF DRAWINGS | SHEET 2 OF 5 |
| | | B0112-A | BNSF - AVE 21 WYE | GENERAL | INDEX OF DRAWINGS | SHEET 3 OF 5 |
| | | B0113-A | BNSF - AVE 21 WYE | GENERAL | INDEX OF DRAWINGS | SHEET 4 OF 5 |
| | | B0114-A | BNSF - AVE 21 WYE | GENERAL | INDEX OF DRAWINGS | SHEET 5 OF 5 |
| | | B0116-A | BNSF - AVE 21 WYE | GENERAL | ABBREVIATIONS, SYMBOLS & NOTES | SHEET 1 OF 1 |
| | | B0117-A | BNSF - AVE 21 WYE | | INDEX MAP | SHEET 1 OF 4 |
| | | B0118-A | BNSF - AVE 21 WYE | | INDEX MAP | SHEET 2 OF 4 |
| | | B0119-A | BNSF - AVE 21 WYE | ALTERNATIVES NO.1, NO.2, NO.3 | INDEX MAP | SHEET 3 OF 4 |
| | | B0120-A | BNSF - AVE 21 WYE | ALTERNATIVES NO.1, NO.2, NO.3 | INDEX MAP | SHEET 4 OF 4 |
| | | CT0121-A | BNSF - AVE 21 WYE | TYPICAL CROSS SECTIONS | GRADE SEPARATIONS | SHEET 1 OF 2 |
| | | CT0122-A | BNSF - AVE 21 WYE | TYPICAL CROSS SECTIONS | GRADE SEPARATIONS | SHEET 2 OF 2 |
| | | CT5000-A | BNSF - AVE 21 WYE | GENERAL STAGE CONSTRUCTION & TRAFFIC HANDLING APPROACH | | SHEET 1 OF 2 |
| | | CT5000-B | BNSF - AVE 21 WYE | GENERAL STAGE CONSTRUCTION & TRAFFIC HANDLING APPROACH | | SHEET 2 OF 2 |
| A1 - AVE 21 WYE (LAYOUT) | | | | | | |
| 1 | | CT0001-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 9 | LAYOUT | SHEET 1 OF 3 |
| 1 | | CT0002-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 9 | LAYOUT | SHEET 2 OF 3 |
| 1 | | CT0003-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 9 | LAYOUT | SHEET 3 OF 3 |
| 2 | | CT0004-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 10 | LAYOUT | SHEET 1 OF 3 |
| 2 | | CT0005-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 10 | LAYOUT | SHEET 2 OF 3 |
| 2 | | CT0006-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 10 | LAYOUT | SHEET 3 OF 3 |
| 3 | | CT0007-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 11 | LAYOUT | SHEET 1 OF 3 |
| 3 | | CT0008-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 11 | LAYOUT | SHEET 2 OF 3 |
| 3 | | CT0009-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 11 | LAYOUT | SHEET 3 OF 3 |
| 4 | | CT0010-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 12 | LAYOUT | SHEET 1 OF 3 |
| 4 | | CT0011-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 12 | LAYOUT | SHEET 2 OF 3 |
| 4 | | CT0012-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 12 | LAYOUT | SHEET 3 OF 3 |
| 5 | | CT0013-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 13 | LAYOUT | SHEET 1 OF 4 |
| 5 | | CT0014-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 13 | LAYOUT | SHEET 2 OF 4 |
| 5 | | CT0015-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 13 | LAYOUT | SHEET 3 OF 4 |
| 5 | | CT0016-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 13 | LAYOUT | SHEET 4 OF 4 |
| 6 | | CT0017-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 | LAYOUT | SHEET 1 OF 3 |
| 6 | | CT0018-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 | LAYOUT | SHEET 2 OF 3 |
| 6 | | CT0019-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 | LAYOUT | SHEET 3 OF 3 |
| 7 | | CT0020-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 1/2 | LAYOUT | SHEET 1 OF 3 |
| 7 | | CT0021-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 1/2 | LAYOUT | SHEET 2 OF 3 |
| 7 | | CT0022-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 1/2 | LAYOUT | SHEET 3 OF 3 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 9 | | CT0026-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 17 | LAYOUT | SHEET 1 OF 3 |
| 9 | | CT0027-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 17 | LAYOUT | SHEET 2 OF 3 |
| 9 | | CT0028-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 17 | LAYOUT | SHEET 3 OF 3 |
| 11 | | CT0032-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 26 | LAYOUT | SHEET 1 OF 3 |
| 11 | | CT0033-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 26 | LAYOUT | SHEET 2 OF 3 |
| 11 | | CT0034-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 26 | LAYOUT | SHEET 3 OF 3 |
| 12 | | CT0035-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 21 | LAYOUT | SHEET 1 OF 3 |
| 12 | | CT0036-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 21 | LAYOUT | SHEET 2 OF 3 |
| 12 | | CT0037-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 21 | LAYOUT | SHEET 3 OF 3 |
| 13 | | CT0038-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 24 | LAYOUT | SHEET 1 OF 3 |
| 13 | | CT0039-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 24 | LAYOUT | SHEET 2 OF 3 |
| 13 | | CT0040-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 24 | LAYOUT | SHEET 3 OF 3 |
| 14 | | CT0041-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - AVENUE 24 | LAYOUT | SHEET 1 OF 3 |
| 14 | | CT0042-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - AVENUE 24 | LAYOUT | SHEET 2 OF 3 |
| 14 | | CT0043-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - AVENUE 24 | LAYOUT | SHEET 3 OF 3 |
| 15 | | CT0044-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 26 | LAYOUT | SHEET 1 OF 4 |
| 15 | | CT0045-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 26 | LAYOUT | SHEET 2 OF 4 |
| 15 | | CT0046-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 26 | LAYOUT | SHEET 3 OF 4 |
| 15 | | CT0047-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 26 | LAYOUT | SHEET 4 OF 4 |
| 16 | | CT0048-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | LAYOUT | SHEET 1 OF 3 |
| 16 | | CT0049-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | LAYOUT | SHEET 2 OF 3 |
| 16 | | CT0050-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | LAYOUT | SHEET 3 OF 3 |
| 17 | | CT0051-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BUCHANAN HOLLOW RD | LAYOUT | SHEET 1 OF 3 |
| 17 | | CT0052-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BUCHANAN HOLLOW RD | LAYOUT | SHEET 2 OF 3 |
| 17 | | CT0053-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BUCHANAN HOLLOW RD | LAYOUT | SHEET 3 OF 3 |
| 18 | | CT0054-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BURCHELL AVE | LAYOUT | SHEET 1 OF 3 |
| 18 | | CT0055-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BURCHELL AVE | LAYOUT | SHEET 2 OF 3 |
| 18 | | CT0056-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BURCHELL AVE | LAYOUT | SHEET 3 OF 3 |
| 19 | | CT0057-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 1 OF 3 |
| 19 | | CT0058-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 2 OF 3 |
| 19 | | CT0059-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 3 OF 3 |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 2 | 02/24/2012 | RG | | | |
| 1 | 12/12/2011 | RG | | | |

DESIGNED BY: R. Gibson
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DATE: 07/27/2011

RECORD SET
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE
GENERAL
INDEX OF DRAWINGS
SHEET 1 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. B0110-A
SCALE NONE
SHEET NO. ### OF ###

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| LOCATION NO. | SHT NO. | DWG NO. | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | DRAWING TITLE LINE 5 | DRAWING TITLE LINE 6 |
|---|---|---|---|---|---|---|
| 20 | | CT0060-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - ARBOLEDA DR | LAYOUT | SHEET 1 OF 3 |
| 20 | | CT0061-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - ARBOLEDA DR | LAYOUT | SHEET 2 OF 3 |
| 20 | | CT0062-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - ARBOLEDA DR | LAYOUT | SHEET 3 OF 3 |
| 21 | | CT0063-A | BNSF WYE CONNECTION - AVE 21 WYE | GRADE SEPARATION - AVENUE 22 | LAYOUT | SHEET 1 OF 3 |
| 21 | | CT0064-A | BNSF WYE CONNECTION - AVE 21 WYE | GRADE SEPARATION - AVENUE 22 | LAYOUT | SHEET 2 OF 3 |
| 21 | | CT0065-A | BNSF WYE CONNECTION - AVE 21 WYE | GRADE SEPARATION - AVENUE 22 | LAYOUT | SHEET 3 OF 3 |
| 22 | | CT0066-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 | LAYOUT | SHEET 1 OF 3 |
| 22 | | CT0067-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 | LAYOUT | SHEET 2 OF 3 |
| 22 | | CT0068-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 | LAYOUT | SHEET 3 OF 3 |
| 23 | | CT0069-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 1/2 | LAYOUT | SHEET 1 OF 3 |
| 23 | | CT0070-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 1/2 | LAYOUT | SHEET 2 OF 3 |
| 23 | | CT0071-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 1/2 | LAYOUT | SHEET 3 OF 3 |
| 24 | | CT0073-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 22 | LAYOUT | SHEET 1 OF 3 |
| 24 | | CT0074-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 22 | LAYOUT | SHEET 2 OF 3 |
| 24 | | CT0075-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 22 | LAYOUT | SHEET 3 OF 3 |
| 25 | | CT0076-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 20 | LAYOUT | SHEET 1 OF 3 |
| 25 | | CT0077-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 20 | LAYOUT | SHEET 2 OF 3 |
| 25 | | CT0078-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 20 | LAYOUT | SHEET 3 OF 3 |
| 26 | | CT0079-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 18 1/2 | LAYOUT | SHEET 1 OF 3 |
| 26 | | CT0080-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 18 1/2 | LAYOUT | SHEET 2 OF 3 |
| 26 | | CT0081-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 18 1/2 | LAYOUT | SHEET 3 OF 3 |
| 27 | | CT0082-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 16 | LAYOUT | SHEET 1 OF 3 |
| 27 | | CT0083-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 16 | LAYOUT | SHEET 2 OF 3 |
| 27 | | CT0084-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 16 | LAYOUT | SHEET 3 OF 3 |
| 65 | | CT0146-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 7 | LAYOUT | SHEET 1 OF 3 |
| 65 | | CT0147-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 7 | LAYOUT | SHEET 2 OF 3 |
| 65 | | CT0148-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 7 | LAYOUT | SHEET 3 OF 3 |
| 64 | | CT0149-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - G STREET | LAYOUT | SHEET 1 OF 1 |
| A1 - AVE 21 WYE - MC ALT 01 (LAYOUT) | | | | | | |
| 70 | | CT0200-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. WHITE ROCK RD | LAYOUT | SHEET 1 OF 3 |
| 70 | | CT0201-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. WHITE ROCK RD | LAYOUT | SHEET 2 OF 3 |
| 70 | | CT0202-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. WHITE ROCK RD | LAYOUT | SHEET 3 OF 3 |
| 71 | | CT0203-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | LAYOUT | SHEET 1 OF 3 |
| 71 | | CT0204-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | LAYOUT | SHEET 2 OF 3 |
| 71 | | CT0205-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | LAYOUT | SHEET 3 OF 3 |
| 72 | | CT0206-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | LAYOUT | SHEET 1 OF 3 |
| 72 | | CT0207-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | LAYOUT | SHEET 2 OF 3 |
| 72 | | CT0208-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | LAYOUT | SHEET 3 OF 3 |
| 73 | | CT0209-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | LAYOUT | SHEET 1 OF 3 |
| 73 | | CT0210-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | LAYOUT | SHEET 2 OF 3 |
| 73 | | CT0211-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | LAYOUT | SHEET 3 OF 3 |
| 74 | | CT0212-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. BURCHELL AVE | LAYOUT | SHEET 1 OF 3 |
| 74 | | CT0213-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. BURCHELL AVE | LAYOUT | SHEET 2 OF 3 |
| 74 | | CT0214-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. BURCHELL AVE | LAYOUT | SHEET 3 OF 3 |
| A1 - AVE 21 WYE - MC ALT 02 (LAYOUT) | | | | | | |
| 75 | | CT0250-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | LAYOUT | SHEET 1 OF 3 |
| 75 | | CT0251-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | LAYOUT | SHEET 2 OF 3 |
| 75 | | CT0252-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | LAYOUT | SHEET 3 OF 3 |
| 76 | | CT0253-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | LAYOUT | SHEET 1 OF 3 |
| 76 | | CT0254-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | LAYOUT | SHEET 2 OF 3 |
| 76 | | CT0255-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | LAYOUT | SHEET 3 OF 3 |
| 77 | | CT0256-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | LAYOUT | SHEET 1 OF 3 |
| 77 | | CT0257-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | LAYOUT | SHEET 2 OF 3 |
| 77 | | CT0258-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | LAYOUT | SHEET 3 OF 3 |
| 78 | | CT0259-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 1 OF 3 |
| 78 | | CT0260-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 2 OF 3 |
| 78 | | CT0261-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 3 OF 3 |
| A1 - AVE 21 WYE - MC ALT 03 (LAYOUT) | | | | | | |
| 79 | | CT0300-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | LAYOUT | SHEET 1 OF 3 |
| 79 | | CT0301-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | LAYOUT | SHEET 2 OF 3 |
| 79 | | CT0302-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | LAYOUT | SHEET 3 OF 3 |
| 80 | | CT0303-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 1 OF 3 |
| 80 | | CT0304-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 2 OF 3 |
| 80 | | CT0305-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | LAYOUT | SHEET 3 OF 3 |
| 81 | | CT0306-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ARBOLEDA RD | LAYOUT | SHEET 1 OF 3 |
| 81 | | CT0307-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ARBOLEDA RD | LAYOUT | SHEET 2 OF 3 |
| 81 | | CT0308-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ARBOLEDA RD | LAYOUT | SHEET 3 OF 3 |
| 82 | | CT0309-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ORCHARD DR | LAYOUT | SHEET 1 OF 3 |
| 82 | | CT0310-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ORCHARD DR | LAYOUT | SHEET 2 OF 3 |
| 82 | | CT0311-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ORCHARD DR | LAYOUT | SHEET 3 OF 3 |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/12/2011 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
GENERAL
INDEX OF DRAWINGS
SHEET 2 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. B0111-A
SCALE NONE
SHEET NO. ### OF ###

USER=DeMarcoF 1/12/2012 10:38:25 AM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Civil\Sheet\ROADWAY\A1-Ave21\Volume 1A - Ave 21 Wye Grade Separation\Index of Drawings\COMBINED SET\MF-B-0111.dgn

| LOCATION NO. | SHT NO. | DWG NO. | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | DRAWING TITLE LINE 5 | DRAWING TITLE LINE 6 |
|---|---|---|---|---|---|---|
| A1 - AVE 21 WYE (SUPERELEVATION TEMPLATES) | | | | | | |
| | | CT0996-A | BNSF - AVE 21 WYE | GRADE SEPARATION | SUPERELEVATION TEMPLATE | SHEET 1 OF 4 |
| | | CT0997-A | BNSF - AVE 21 WYE | GRADE SEPARATION | SUPERELEVATION TEMPLATE | SHEET 2 OF 4 |
| | | CT0998-A | BNSF - AVE 21 WYE | GRADE SEPARATION | SUPERELEVATION TEMPLATE | SHEET 3 OF 4 |
| | | CT0999-A | BNSF - AVE 21 WYE | GRADE SEPARATION | SUPERELEVATION TEMPLATE | SHEET 4 OF 4 |
| A1 - AVE 21 WYE (PROFILES) | | | | | | |
| 1 | | CT1000-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 9 | PROFILE | SHEET 1 OF 3 |
| 1 | | CT1001-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 9 | PROFILE | SHEET 2 OF 3 |
| 1 | | CT1002-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 9 | PROFILE | SHEET 3 OF 3 |
| 2 | | CT1003-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 10 | PROFILE | SHEET 1 OF 3 |
| 2 | | CT1004-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 10 | PROFILE | SHEET 2 OF 3 |
| 2 | | CT1005-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 10 | PROFILE | SHEET 3 OF 3 |
| 3 | | CT1006-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 11 | PROFILE | SHEET 1 OF 3 |
| 3 | | CT1007-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 11 | PROFILE | SHEET 2 OF 3 |
| 3 | | CT1008-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 11 | PROFILE | SHEET 3 OF 3 |
| 4 | | CT1009-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 12 | PROFILE | SHEET 1 OF 3 |
| 4 | | CT1010-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 12 | PROFILE | SHEET 2 OF 3 |
| 4 | | CT1011-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 12 | PROFILE | SHEET 3 OF 3 |
| 5 | | CT1012-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 13 | PROFILE | SHEET 1 OF 3 |
| 5 | | CT1013-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 13 | PROFILE | SHEET 2 OF 3 |
| 5 | | CT1014-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 13 | PROFILE | SHEET 3 OF 3 |
| 6 | | CT1015-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 | PROFILE | SHEET 1 OF 3 |
| 6 | | CT1016-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 | PROFILE | SHEET 2 OF 3 |
| 6 | | CT1017-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 | PROFILE | SHEET 3 OF 3 |
| 7 | | CT1018-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 1/2 | PROFILE | SHEET 1 OF 3 |
| 7 | | CT1019-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 1/2 | PROFILE | SHEET 2 OF 3 |
| 7 | | CT1020-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 15 1/2 | PROFILE | SHEET 3 OF 3 |
| | | | | | | |
| | | | | | | |
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| 9 | | CT1024-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 17 | PROFILE | SHEET 1 OF 3 |
| 9 | | CT1025-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 17 | PROFILE | SHEET 2 OF 3 |
| 9 | | CT1026-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 17 | PROFILE | SHEET 3 OF 3 |
| 11 | | CT1030-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 26 | PROFILE | SHEET 1 OF 3 |
| 11 | | CT1031-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 26 | PROFILE | SHEET 2 OF 3 |
| 11 | | CT1032-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 26 | PROFILE | SHEET 3 OF 3 |
| 12 | | CT1033-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 21 | PROFILE | SHEET 1 OF 3 |
| 12 | | CT1034-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 21 | PROFILE | SHEET 2 OF 3 |
| 12 | | CT1035-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 21 | PROFILE | SHEET 3 OF 3 |
| 13 | | CT1036-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 24 | PROFILE | SHEET 1 OF 3 |
| 13 | | CT1037-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 24 | PROFILE | SHEET 2 OF 3 |
| 13 | | CT1038-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 24 | PROFILE | SHEET 3 OF 3 |
| 14 | | CT1039-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - AVENUE 24 | PROFILE | SHEET 1 OF 3 |
| 14 | | CT1040-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - AVENUE 24 | PROFILE | SHEET 2 OF 3 |
| 14 | | CT1041-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - AVENUE 24 | PROFILE | SHEET 3 OF 3 |
| 15 | | CT1042-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 26 | PROFILE | SHEET 1 OF 3 |
| 15 | | CT1043-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 26 | PROFILE | SHEET 2 OF 3 |
| 15 | | CT1044-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 26 | PROFILE | SHEET 3 OF 3 |
| 16 | | CT1045-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - SANTA FE AVE | PROFILE | SHEET 1 OF 3 |
| 16 | | CT1046-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - SANTA FE AVE | PROFILE | SHEET 2 OF 3 |
| 16 | | CT1047-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - SANTA FE AVE | PROFILE | SHEET 3 OF 3 |
| 17 | | CT1048-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - BUCHANAN HOLLOW RD | PROFILE | SHEET 1 OF 3 |
| 17 | | CT1049-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - BUCHANAN HOLLOW RD | PROFILE | SHEET 2 OF 3 |
| 17 | | CT1050-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - BUCHANAN HOLLOW RD | PROFILE | SHEET 3 OF 3 |
| 18 | | CT1051-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BURCHELL AVE | PROFILE | SHEET 1 OF 3 |
| 18 | | CT1052-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BURCHELL AVE | PROFILE | SHEET 2 OF 3 |
| 18 | | CT1053-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - BURCHELL AVE | PROFILE | SHEET 3 OF 3 |
| 19 | | CT1054-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 1 OF 3 |
| 19 | | CT1055-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 2 OF 3 |
| 19 | | CT1056-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 3 OF 3 |
| 20 | | CT1057-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - ARBOLEDA DR | PROFILE | SHEET 1 OF 3 |
| 20 | | CT1058-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - ARBOLEDA DR | PROFILE | SHEET 2 OF 3 |
| 20 | | CT1059-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - ARBOLEDA DR | PROFILE | SHEET 3 OF 3 |
| 21 | | CT1060-A | BNSF WYE CONNECTION - AVE 21 WYE | GRADE SEPARATION - AVENUE 22 | PROFILE | SHEET 1 OF 3 |
| 21 | | CT1061-A | BNSF WYE CONNECTION - AVE 21 WYE | GRADE SEPARATION - AVENUE 22 | PROFILE | SHEET 2 OF 3 |
| 21 | | CT1062-A | BNSF WYE CONNECTION - AVE 21 WYE | GRADE SEPARATION - AVENUE 22 | PROFILE | SHEET 3 OF 3 |
| 22 | | CT1063-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 | PROFILE | SHEET 1 OF 3 |
| 22 | | CT1064-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 | PROFILE | SHEET 2 OF 3 |
| 22 | | CT1065-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 | PROFILE | SHEET 3 OF 3 |
| 23 | | CT1066-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 1/2 | PROFILE | SHEET 1 OF 3 |
| 23 | | CT1067-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 1/2 | PROFILE | SHEET 2 OF 3 |
| 23 | | CT1068-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 20 1/2 | PROFILE | SHEET 3 OF 3 |

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 2 | 02/24/2012 | RG | | | |
| 1 | 12/12/2011 | RG | | | |

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DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
GENERAL
INDEX OF DRAWINGS
SHEET 3 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. B0112-A
SCALE NONE
SHEET NO. ### OF ###

| LOCATION NO. | SHT NO. | DWG NO. | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | DRAWING TITLE LINE 5 | DRAWING TITLE LINE 6 |
|---|---|---|---|---|---|---|
| 24 | | CT1069-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 22 | PROFILE | SHEET 1 OF 3 |
| 24 | | CT1070-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 22 | PROFILE | SHEET 2 OF 3 |
| 24 | | CT1071-A | BNSF MAIN LINE - AVE 21 WYE | UNDERPASS - ROAD 22 | PROFILE | SHEET 3 OF 3 |
| 25 | | CT1072-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 20 | PROFILE | SHEET 1 OF 3 |
| 25 | | CT1073-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 20 | PROFILE | SHEET 2 OF 3 |
| 25 | | CT1074-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 20 | PROFILE | SHEET 3 OF 3 |
| 26 | | CT1075-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 18 1/2 | PROFILE | SHEET 1 OF 3 |
| 26 | | CT1076-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 18 1/2 | PROFILE | SHEET 2 OF 3 |
| 26 | | CT1077-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 18 1/2 | PROFILE | SHEET 3 OF 3 |
| 27 | | CT1078-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 16 | PROFILE | SHEET 1 OF 3 |
| 27 | | CT1079-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 16 | PROFILE | SHEET 2 OF 3 |
| 27 | | CT1080-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - ROAD 16 | PROFILE | SHEET 3 OF 3 |
| 65 | | CT1146-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 7 | PROFILE | SHEET 1 OF 3 |
| 65 | | CT1147-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 7 | PROFILE | SHEET 2 OF 3 |
| 65 | | CT1148-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 7 | PROFILE | SHEET 3 OF 3 |
| 64 | | CT1149-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - G STREET | PROFILE | SHEET 1 OF 1 |
| A1 - AVE 21 WYE - MC ALT 01 (PROFILES) | | | | | | |
| 70 | | CT1200-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - WHITE ROCK RD | PROFILE | SHEET 1 OF 3 |
| 70 | | CT1201-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - WHITE ROCK RD | PROFILE | SHEET 2 OF 3 |
| 70 | | CT1202-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - WHITE ROCK RD | PROFILE | SHEET 3 OF 3 |
| 71 | | CT1203-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | PROFILE | SHEET 1 OF 3 |
| 71 | | CT1204-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | PROFILE | SHEET 2 OF 3 |
| 71 | | CT1205-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | PROFILE | SHEET 3 OF 3 |
| 72 | | CT1206-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | PROFILE | SHEET 1 OF 3 |
| 72 | | CT1207-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | PROFILE | SHEET 2 OF 3 |
| 72 | | CT1208-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | PROFILE | SHEET 3 OF 3 |
| 73 | | CT1209-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | PROFILE | SHEET 1 OF 3 |
| 73 | | CT1210-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | PROFILE | SHEET 2 OF 3 |
| 73 | | CT1211-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | PROFILE | SHEET 3 OF 3 |
| 74 | | CT1212-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. BURCHELL AVE | PROFILE | SHEET 1 OF 3 |
| 74 | | CT1213-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. BURCHELL AVE | PROFILE | SHEET 2 OF 3 |
| 74 | | CT1214-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. BURCHELL AVE | PROFILE | SHEET 3 OF 3 |
| A1 - AVE 21 WYE - MC ALT 02 (PROFILES) | | | | | | |
| 75 | | CT1250-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | PROFILE | SHEET 1 OF 3 |
| 75 | | CT1251-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | PROFILE | SHEET 2 OF 3 |
| 75 | | CT1252-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - LE GRAND RD | PROFILE | SHEET 3 OF 3 |
| 76 | | CT1253-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | PROFILE | SHEET 1 OF 3 |
| 76 | | CT1254-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | PROFILE | SHEET 2 OF 3 |
| 76 | | CT1255-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. FRESNO RD | PROFILE | SHEET 3 OF 3 |
| 77 | | CT1256-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | PROFILE | SHEET 1 OF 3 |
| 77 | | CT1257-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | PROFILE | SHEET 2 OF 3 |
| 77 | | CT1258-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. CUNNINGHAM RD | PROFILE | SHEET 3 OF 3 |
| 78 | | CT1259-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 1 OF 3 |
| 78 | | CT1260-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 2 OF 3 |
| 78 | | CT1261-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 3 OF 3 |
| A1 - AVE 21 WYE - MC ALT 03 (PROFILES) | | | | | | |
| 79 | | CT1300-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | PROFILE | SHEET 1 OF 3 |
| 79 | | CT1301-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | PROFILE | SHEET 2 OF 3 |
| 79 | | CT1302-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. SANTA FE AVE | PROFILE | SHEET 3 OF 3 |
| 80 | | CT1303-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 1 OF 3 |
| 80 | | CT1304-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 2 OF 3 |
| 80 | | CT1305-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - PLAINSBURG RD | PROFILE | SHEET 3 OF 3 |
| 81 | | CT1306-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ARBOLEDA RD | PROFILE | SHEET 1 OF 3 |
| 81 | | CT1307-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ARBOLEDA RD | PROFILE | SHEET 2 OF 3 |
| 81 | | CT1308-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ARBOLEDA RD | PROFILE | SHEET 3 OF 3 |
| 82 | | CT1309-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ORCHARD DR | PROFILE | SHEET 1 OF 3 |
| 82 | | CT1310-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ORCHARD DR | PROFILE | SHEET 2 OF 3 |
| 82 | | CT1311-A | BNSF MERCED CONNECTION - AVE 21 WYE | GRADE SEPARATION - S. ORCHARD DR | PROFILE | SHEET 3 OF 3 |
| PTG (LAYOUTS AND PROFILES) | | | | | | |
| | | CT1477-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | ROAD 11 GRADE SEPARATION | PLAN AND PROFILE |
| | | CT1478-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | ROAD 11 GRADE SEPARATION | PLAN AND PROFILE |
| | | CT1481-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | ROBERTSON BLVD GRADE SEPARATION | PLAN AND PROFILE |
| | | CT1482-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | ROBERTSON BLVD GRADE SEPARATON | PLAN AND PROFILE |
| | | CT1484-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | ROAD 14 GRADE SEPARATION | PLAN AND PROFILE |
| | | CT1485-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | ROAD 14 GRADE SEPARATION | PLAN AND PROFILE |
| | | | | | | |
| | | CT1926-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 9/HEMLOCK ROAD GRADE SEPARATION | |
| | | CT1927-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 9/HEMLOCK ROAD GRADE SEPARATION | |
| | | CT1928-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 9/HEMLOCK ROAD GRADE SEPARATION | |
| | | CT1929-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 11 GRADE SEPARATION | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/12/2011 | RG | | | |

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DRAWN BY F. DEMARCO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
GENERAL
INDEX OF DRAWINGS
SHEET 4 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. B0113-A
SCALE NONE
SHEET NO. ### OF ###

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| LOCATION NO. | SHT NO. | DWG NO. | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | DRAWING TITLE LINE 5 | DRAWING TITLE LINE 6 |
|---|---|---|---|---|---|---|
| | | CT1930-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 11 GRADE SEPARATION | |
| | | CT1931-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 11 GRADE SEPARATION | |
| | | CT1932-A | BNSF MAIN LINE | PLAN AND PROFILE | ROBERSTON BLVD GRADE SEPARATION | |
| | | CT1933-A | BNSF MAIN LINE | PLAN AND PROFILE | ROBERSTON BLVD GRADE SEPARATION | |
| | | CT1934-A | BNSF MAIN LINE | PLAN AND PROFILE | ROBERSTON BLVD GRADE SEPARATION | |
| | | CT1935-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 14 GRADE SEPARATION | |
| | | CT1936-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 14 GRADE SEPARATION | |
| | | CT1937-A | BNSF MAIN LINE | PLAN AND PROFILE | ROAD 14 GRADE SEPARATION | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/12/2011 | RG | | | |

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DRAWN BY F. DEMARCO
CHECKED BY A. BOONE
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE
GENERAL
INDEX OF DRAWINGS
SHEET 5 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. B0114-A
SCALE NONE
SHEET NO. ### OF ###

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# ABBREVIATIONS

## ALIGNMENT

HORIZONTAL

| | |
|---|---|
| BC | BEGINNING OF CURVE |
| EC | END OF CURVE |
| PC | POINT OF CURVE |
| PI | POINT OF INTERSECTION OF TWO TANGENTS |
| POC | POINT ON CURVE |
| POT | POINT ON TANGENT |
| PRC | POINT OF REVERSE CURVES |
| PT | POINT OF TANGENCY |
| R | RADIUS OF CURVATURE IN FEET |
| V, DS | VELOCITY, DESIGN SPEED IN MILES PER HOUR |

VERTICAL

| | |
|---|---|
| PVC | POINT OF VERTICAL CURVE (BEGINNING OF CURVE) |
| PVI | POINT OF VERTICAL INTERSECTION (OF TANGENTS) |
| PVT | POINT OF VERTICAL TANGENCY (ENDING OF CURVE) |
| VC | VERTICAL CURVE |

## MISCELLANEOUS

| | |
|---|---|
| BEG | BEGIN |
| BLVD | BOULEVARD |
| ℄ | CENTER LINE |
| CL | CENTERLINE, CLASS |
| CLR | CLEAR |
| COL | COLUMN |
| DWG | DRAWING |
| EQ | EQUATION |
| EXIST(E) | EXISTING |
| IN | INCH |
| LT | LEFT |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| N | NORTH |
| NB | NORTH BOUND |
| NTS | NOT TO SCALE |
| OG | ORIGINAL GROUND |
| O/H OH | OVERHEAD |
| PG&E | PACIFIC GAS & ELECTRIC |
| PGL, FG | PROFILE GRADE LINE |
| RR | RAILROAD |
| RD | ROAD |
| R/W | RIGHT OF WAY |
| RT | RIGHT |
| SS | SANITARY SEWER |
| SHT | SHEET |
| ST | STREET |
| STD | STANDARD |
| SD | STORM DRAIN |
| STRUCT, STR | STRUCTURE |
| T | TELEPHONE |
| | (OH) OVERHEAD LINE |
| | (UG) UNDERGROUND LINE |
| TOR | TOP OF RAIL |
| TK | TRACK |
| TYP | TYPICAL |
| TBD | TO BE DETERMINED |
| TF | TELECOMMUNICATIONS FIBER OPTIC |
| V VERT | VERTICAL |
| W | WATER, WEST |

# SYMBOLS

MATCH LINE

HST TRACK

PROPOSED HST RIGHT-OF-WAY

FREIGHT/PASSENGER TRACK - EXISTING

EXISTING RIGHT-OF-WAY OR EXISTING BRIDGE FEATURES

RETAINING WALLS

ORIGINAL GROUND

G16 — GAS LINE (16")

TC — COMMUNICATION LINE

W — WATER LINE

FO — FIBER OPTIC LINE

E — ELECTRICAL LINE

ELECTRICAL TOWER

S — SEWER LINE

SD — STORM DRAIN LINE

O — FUEL LINE

TC — TELEPHONE LINE

P12 — PETROLEUM LINE (12")

(OH) — OVERHEAD LINE

NORTH ARRROW

PVI

(UG) — UNDERGROUND LINE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/20/2011

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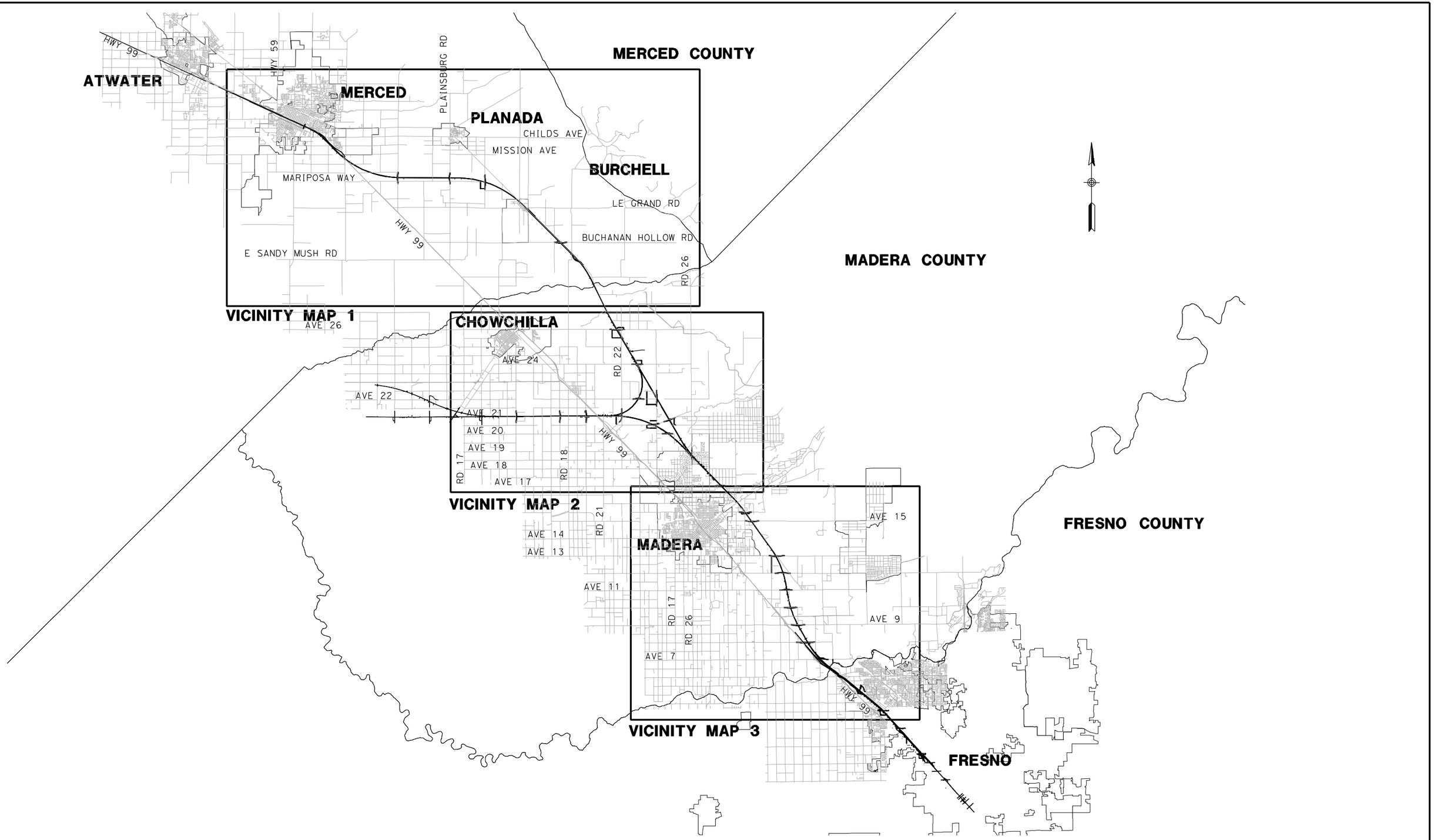
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
GENERAL
ABBREVIATIONS, SYMBOLS & NOTES
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. B0116-A
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CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO
BNSF - AVE 21 WYE

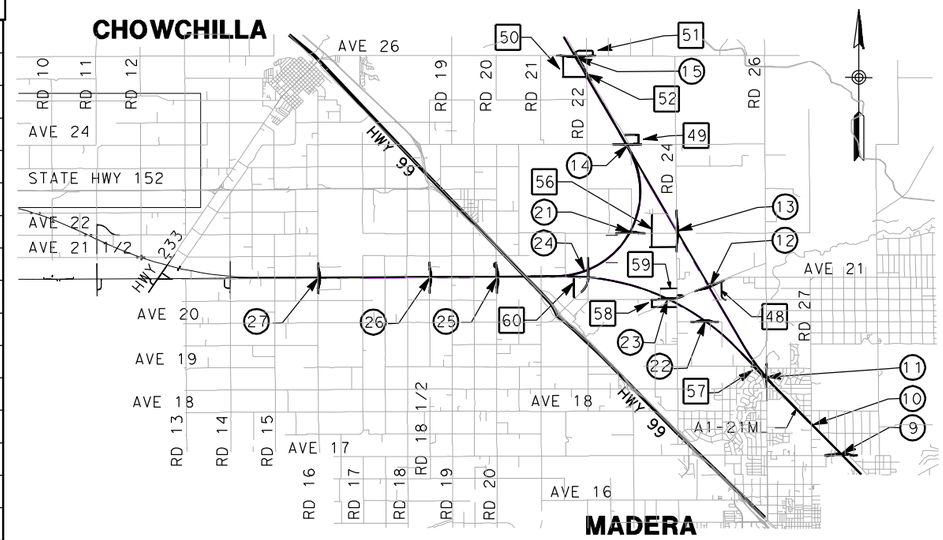
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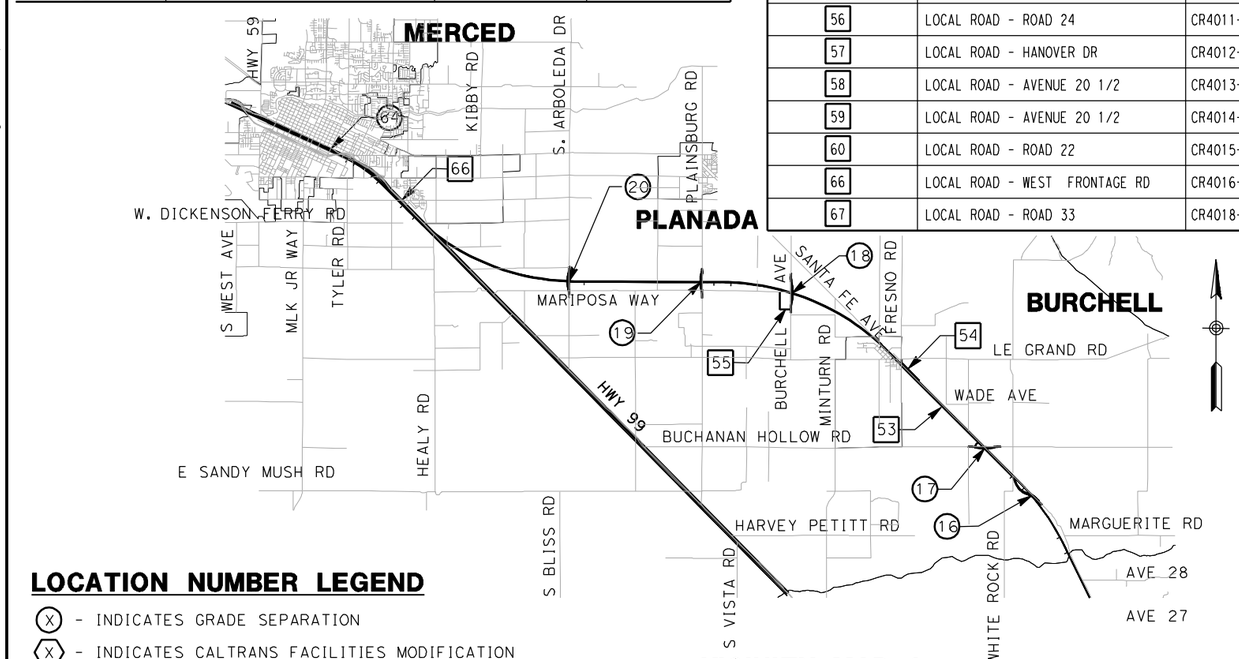
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|---|---|---|---|
| (1) | GRADE SEPARATION - AVENUE 9 | CT0001-A - CT0003-A | ST1001 |
| (2) | GRADE SEPARATION - AVENUE 10 | CT0004-A - CT0006-A | ST1002 |
| (3) | GRADE SEPARATION - AVENUE 11 | CT0007-A - CT0009-A | ST1003 |
| (4) | GRADE SEPARATION - AVENUE 12 | CT0010-A - CT0012-A | ST1004 |
| (5) | GRADE SEPARATION - AVENUE 13 | CT0013-A - CT0016-A | ST1005 |
| (6) | GRADE SEPARATION - AVENUE 15 | CT0017-A - CT0019-A | ST1006 |
| (7) | GRADE SEPARATION - AVENUE 15 1/2 | CT0020-A - CT0022-A | ST1007 |
| | | | |
| (9) | GRADE SEPARATION - AVENUE 17 | CT0026-A - CT0028-A | ST1009 |
| (11) | UNDERPASS - ROAD 26 | CT0032-A - CT0034-A | ST1011 |
| (12) | GRADE SEPARATION - AVENUE 21 | CT0035-A - CT0037-A | ST1012 |
| (13) | GRADE SEPARATION - ROAD 24 | CT0038-A - CT0040-A | ST1013 |
| (14) | UNDERPASS - AVENUE 24 | CT0041-A - CT0043-A | ST1014 |
| (15) | GRADE SEPARATION - AVENUE 26 | CT0044-A - CT0047-A | ST1015 |
| (16) | GRADE SEPARATION - SANTA FE AVE | CT0048-A - CT0050-A | ST1016 |
| (17) | GRADE SEPARATION - BUCHANAN HOLLOW | CT0051-A - CT0053-A | ST1017 |
| (18) | GRADE SEPARATION - BURCHELL AVE | CT0054-A - CT0056-A | ST1018 |
| (19) | GRADE SEPARATION - PLAINSBURG RD | CT0057-A - CT0059-A | ST1019 |
| (20) | GRADE SEPARATION - ARBOLEDA DR | CT0060-A - CT0062-A | ST1020 |
| (21) | GRADE SEPARATION - AVENUE 22 | CT0063-A - CT0065-A | ST1021 |

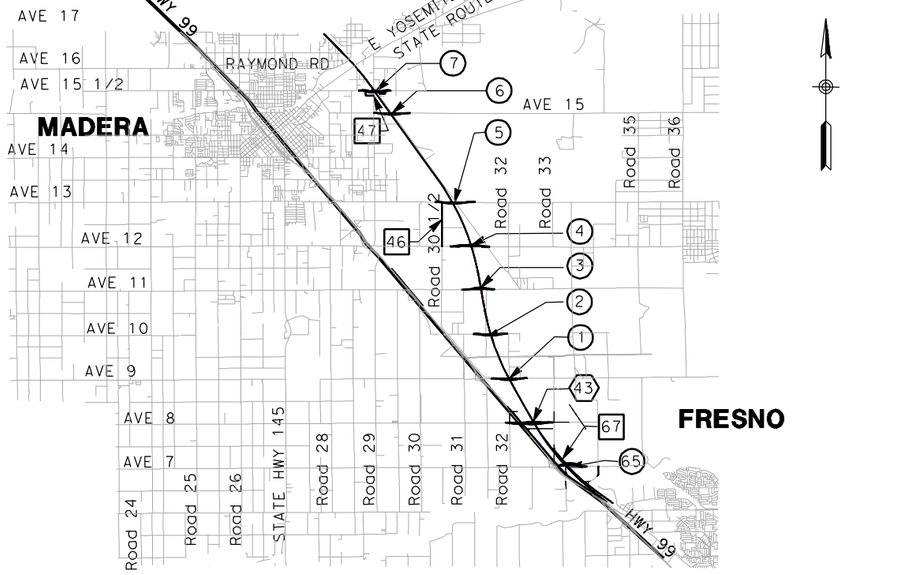
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| (22) | GRADE SEPARATION - AVENUE 20 | CT0066-A - CT0068-A | ST1022 |
| (23) | GRADE SEPARATION - AVENUE 20 1/2 | CT0069-A - CT0071-A | ST1023 |
| (24) | UNDERPASS - ROAD 22 | CT0073-A - CT0075-A | |
| (25) | GRADE SEPARATION - ROAD 20 | CT0076-A - CT0078-A | ST1026 |
| (26) | GRADE SEPARATION - ROAD 18 1/2 | CT0079-A - CT0081-A | ST1027 |
| (27) | GRADE SEPARATION - ROAD 16 | CT0082-A - CT0084-A | ST1028 |
| (64) | GRADE SEPARATION - G STREET | CT0149 | ST1180 |
| (65) | GRADE SEPARATION - AVENUE 7 | CT0146-A - CT0148-A | ST1070 |
| (43) | CALTRANS - AVENUE 8 | CT2000-A - CT2003-A | ST1000 |
| | | | |
| [46] | LOCAL ROAD - ROAD 30 1/2 | CR4000-A | |
| [47] | LOCAL ROAD - ROAD 29 | CR4001-A | |
| [48] | LOCAL ROAD - AVENUE 20 1/2 | CR4002-A | |
| [49] | LOCAL ROAD - SHARON | CR4003-A | |
| [50] | LOCAL ROAD - AVENUE 26 | CR4004-A | |
| [51] | LOCAL ROAD - AVENUE 26 | CR4005-A | |
| [52] | LOCAL ROAD - SANTA FE AVE | CR4006-A | |
| [53] | LOCAL ROAD - SANTA FE AVE | CR4007-A - CR4009-A | |
| [54] | LOCAL ROAD - SANTA FE AVE (SOUTH) | CR4009-A | |
| [55] | LOCAL ROAD - BURCHELL RD | CR4010-A | |
| [56] | LOCAL ROAD - ROAD 24 | CR4011-A | |
| [57] | LOCAL ROAD - HANOVER DR | CR4012-A | |
| [58] | LOCAL ROAD - AVENUE 20 1/2 | CR4013-A | |
| [59] | LOCAL ROAD - AVENUE 20 1/2 | CR4014-A | |
| [60] | LOCAL ROAD - ROAD 22 | CR4015-A | |
| [66] | LOCAL ROAD - WEST FRONTAGE RD | CR4016-A - CR4017-A | |
| [67] | LOCAL ROAD - ROAD 33 | CR4018-A | |




## VICINITY MAP 2




## VICINITY MAP 1




## VICINITY MAP 3

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

⟨X⟩ - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

FOR ROADWAY STRUCTURES SEE STRUCTURAL INDEX MAPS

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

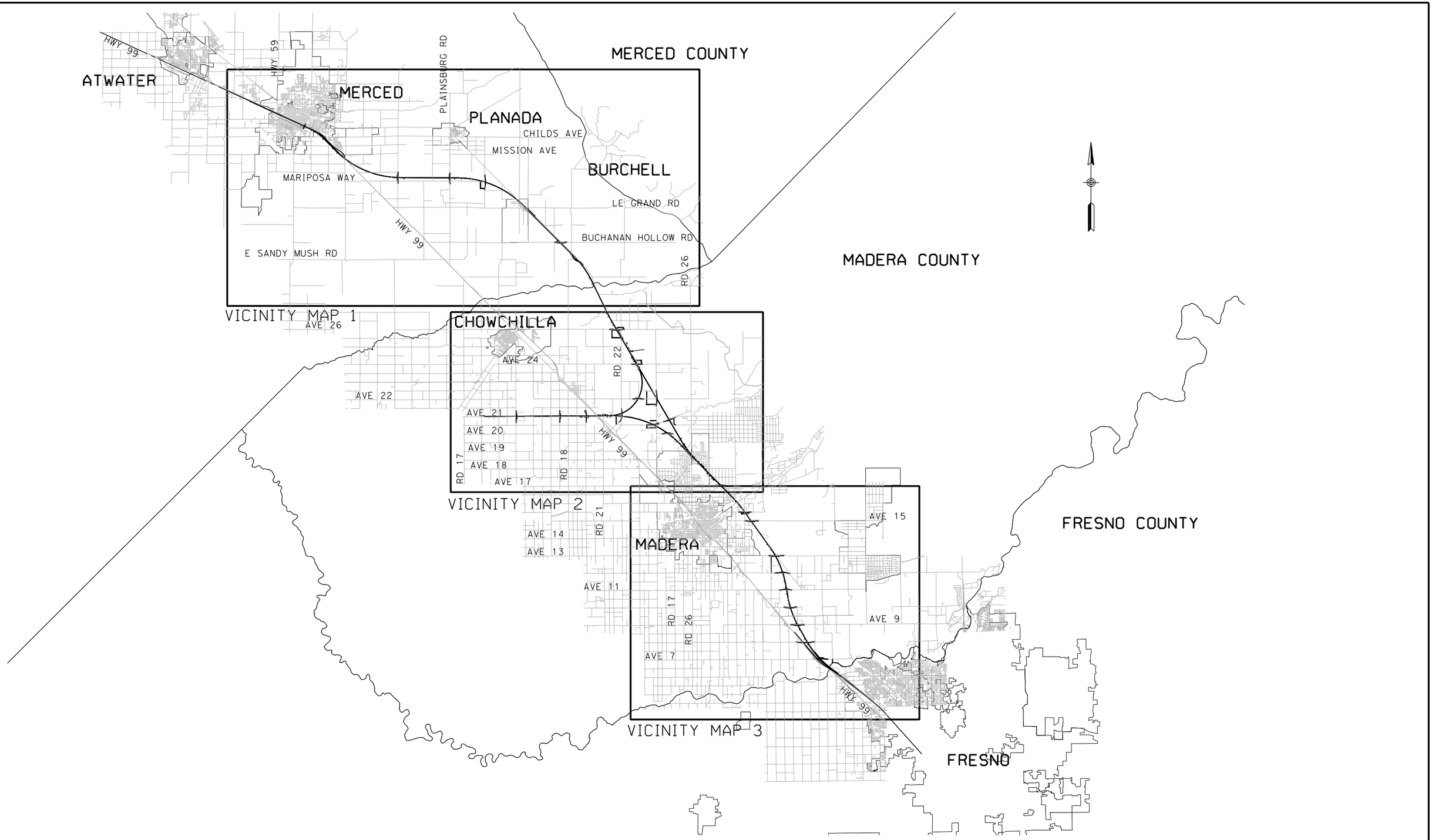
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE

INDEX MAP
SHEET 2 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. B0116-A
SCALE AS SHOWN
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

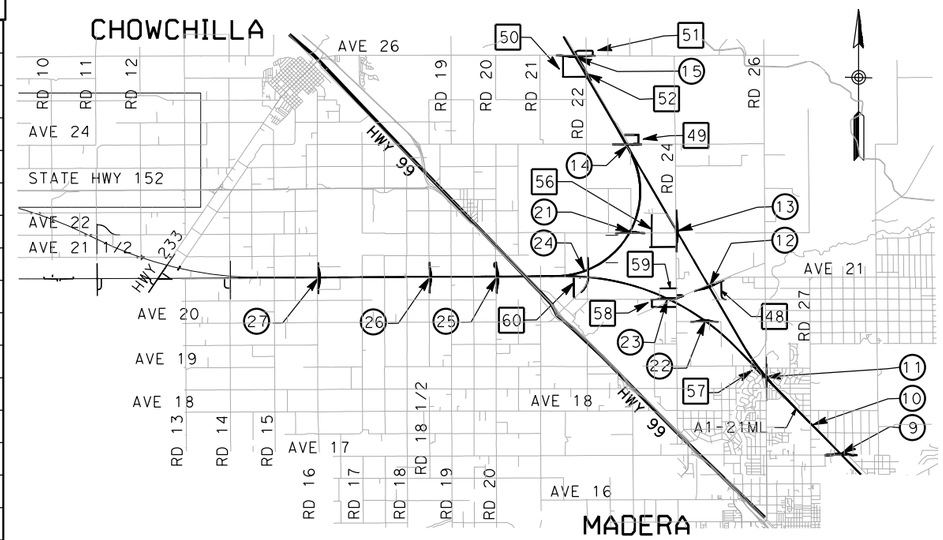
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE

INDEX MAP
SHEET 1 OF 4

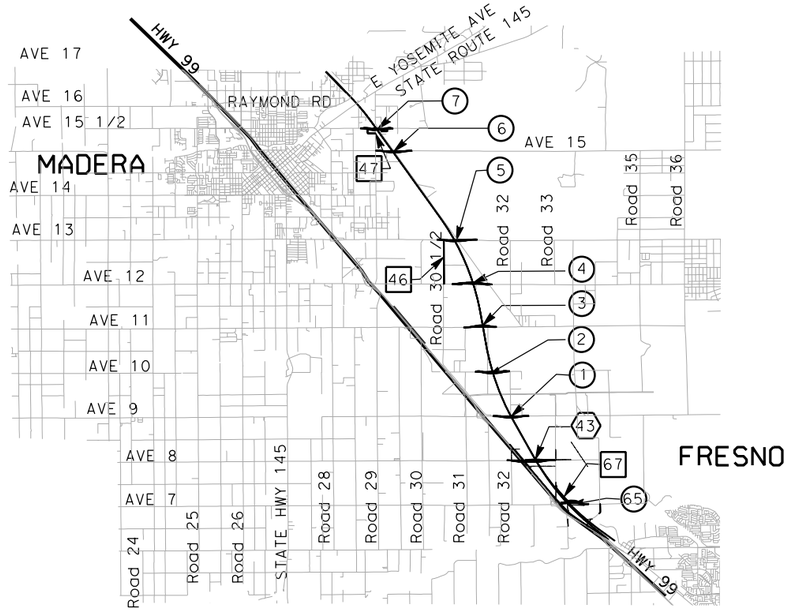
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| (4) | GRADE SEPARATION - AVENUE 12 | CT0010-A - CT0012-A | ST1004 |
| (5) | GRADE SEPARATION - AVENUE 13 | CT0013-A - CT0016-A | ST1005 |
| (6) | GRADE SEPARATION - AVENUE 15 | CT0017-A - CT0019-A | ST1006 |
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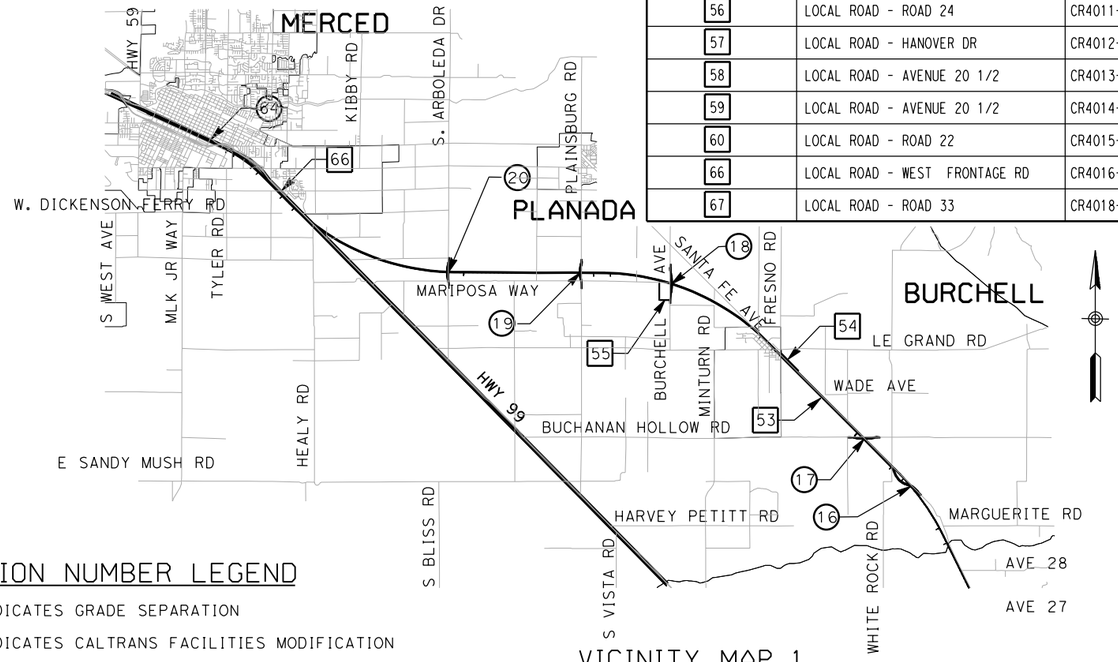
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| (26) | GRADE SEPARATION - ROAD 18 1/2 | CT0079-A - CT0081-A | ST1027 |
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| (65) | GRADE SEPARATION - AVENUE 7 | CT0146-A - CT0148-A | ST1070 |
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| [55] | LOCAL ROAD - BURCHELL RD | CR4010-A | |
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| [60] | LOCAL ROAD - ROAD 22 | CR4015-A | |
| [66] | LOCAL ROAD - WEST FRONTAGE RD | CR4016-A - CR4017-A | |
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VICINITY MAP 2




VICINITY MAP 3




VICINITY MAP 1

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

⟨X⟩ - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

FOR ROADWAY STRUCTURES SEE STRUCTURAL INDEX MAPS

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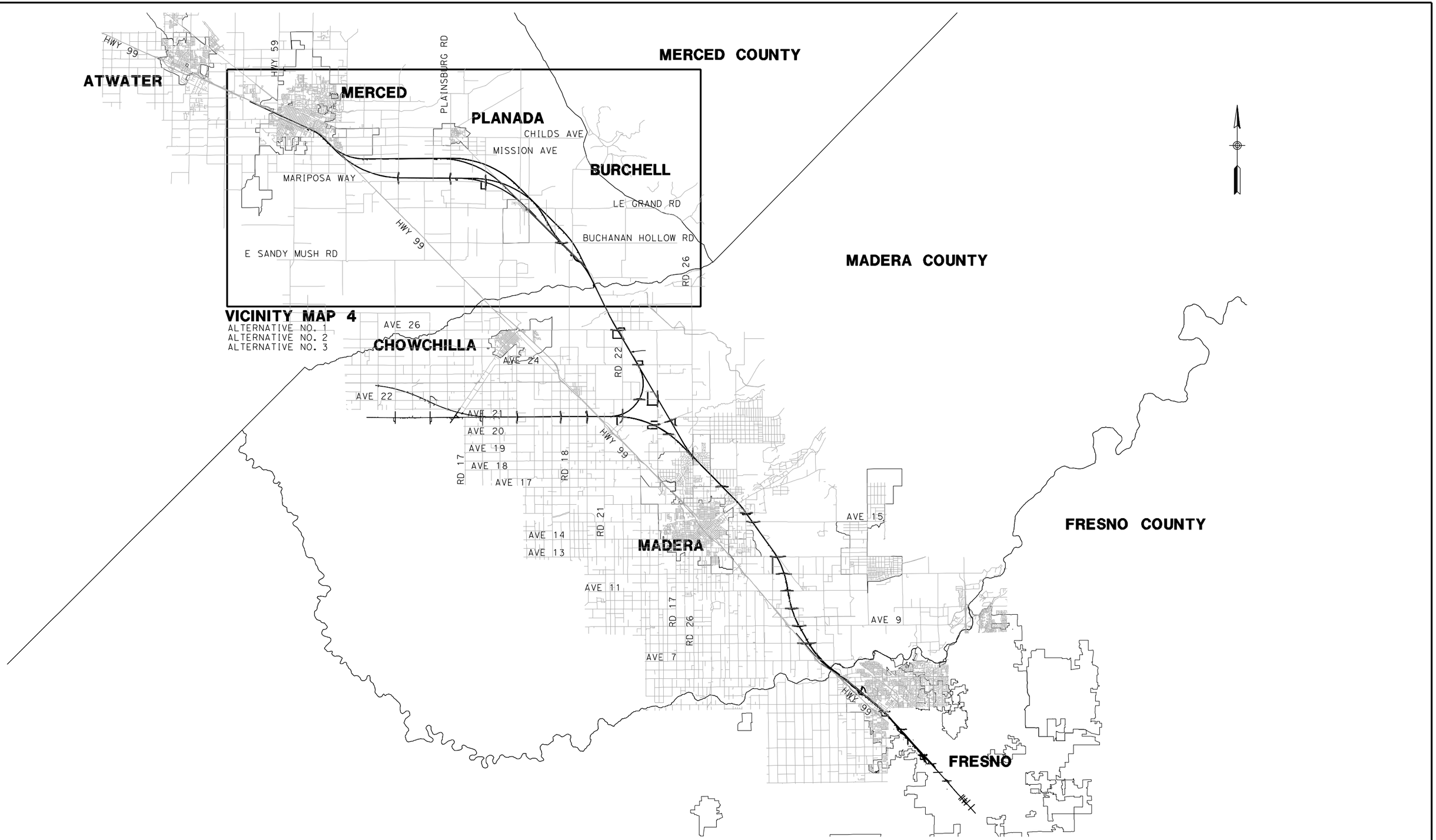
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE

INDEX MAP
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DATE: 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

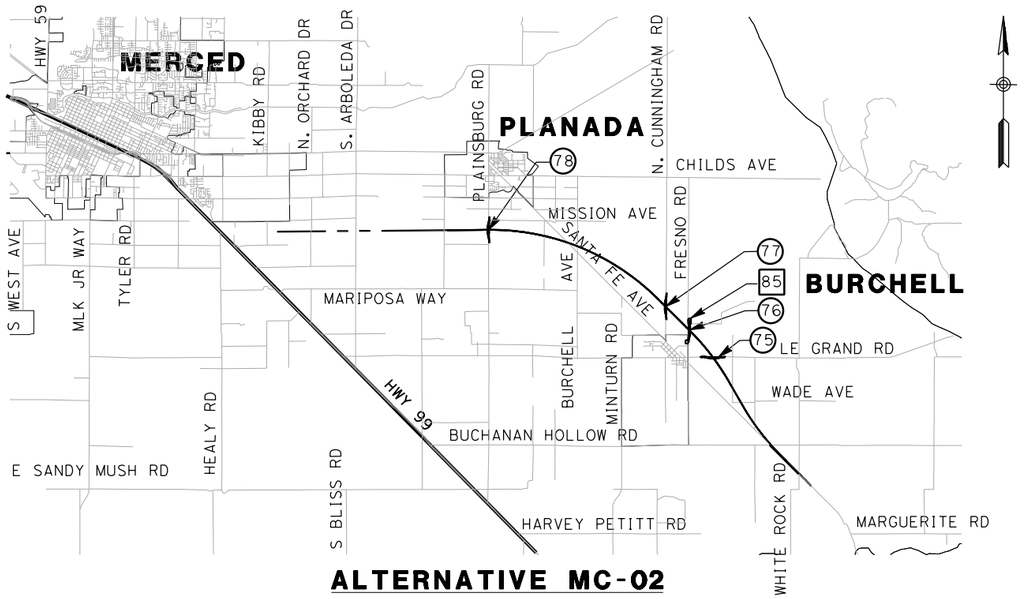
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE
MC - ALTERNATIVES NO. 1, NO. 2, & NO. 3

INDEX MAP
SHEET 3 OF 4

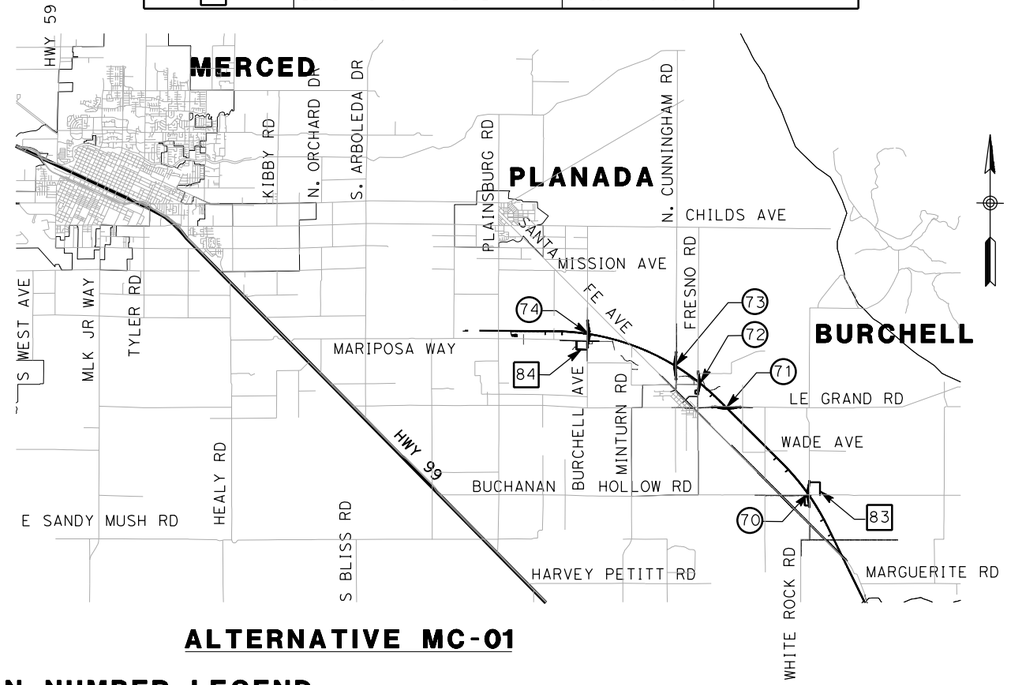
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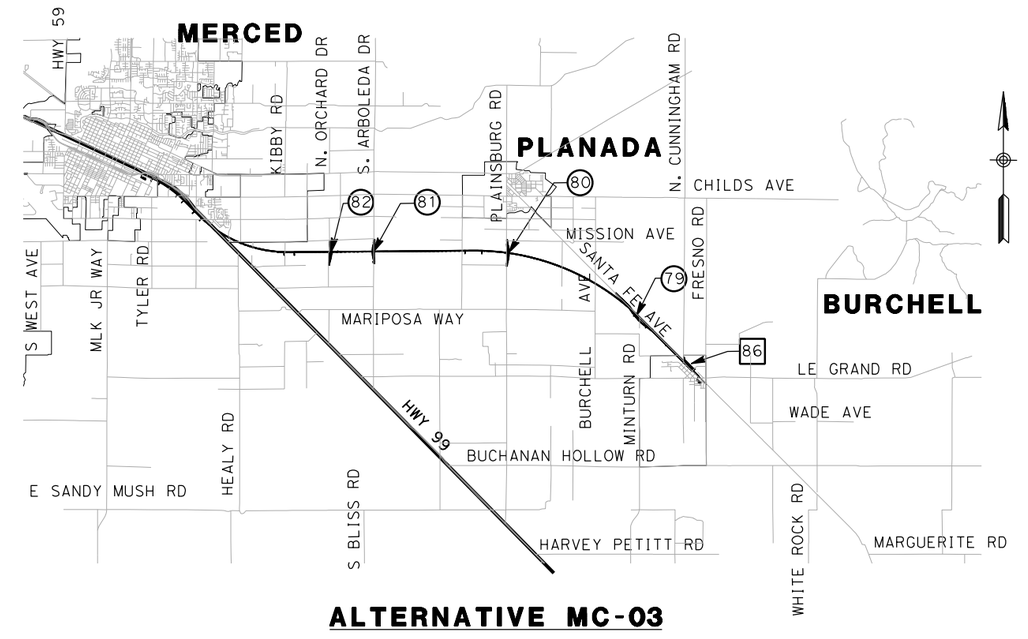
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| (71) | GRADE SEPARATION - LE GRAND RD | CT0203-A - CT0205-A | ST1051 |
| (72) | GRADE SEPARATION - S. FRESNO RD | CT0206-A - CT0208-A | ST1052 |
| (73) | GRADE SEPARATION - S. CUNNINGHAM RD | CT0209-A - CT0211-A | ST1053 |
| (74) | GRADE SEPARATION - S. BURCHELL AVE | CT0212-A - CT0214-A | ST1054 |
| (75) | GRADE SEPARATION - LE GRAND RD | CT0250-A - CT0252-A | ST1055 |
| (76) | GRADE SEPARATION - S. FRESNO RD | CT0253-A - CT0255-A | ST1056 |
| (77) | GRADE SEPARATION - S. CUNNINGHAM RD | CT0256-A - CT0258-A | ST1057 |
| (78) | GRADE SEPARATION - PLAINSBURG RD | CT0259-A - CT0261-A | ST1058 |
| (79) | GRADE SEPARATION - S. SANTA FE AVE | CT0300-A - CT0302-A | ST1059 |
| (80) | GRADE SEPARATION - PLAINSBURG RD | CT0303-A - CT0305-A | ST1060 |
| (81) | GRADE SEPARATION - S. ARBOLEDA RD | CT0306-A - CT0308-A | ST1061 |
| (82) | GRADE SEPARATION - S. ORCHARD DR | CT0309-A - CT0311-A | ST1062 |
| [83] | LOCAL ROAD - WHITE ROCK RD | CR4200-A - CR4201-A | |
| [84] | LOCAL ROAD - BURCHELL AVE | CR4202-A | |
| [85] | LOCAL ROAD - FRESNO RD | CR4255-A | |
| [86] | LOCAL ROAD - SANTA FE AVE | CR4300-A - CR4301-A | |




## ALTERNATIVE MC-02




## ALTERNATIVE MC-01




## ALTERNATIVE MC-03

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

⟨X⟩ - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

FOR ROADWAY STRUCTURES SEE STRUCTURAL INDEX MAPS

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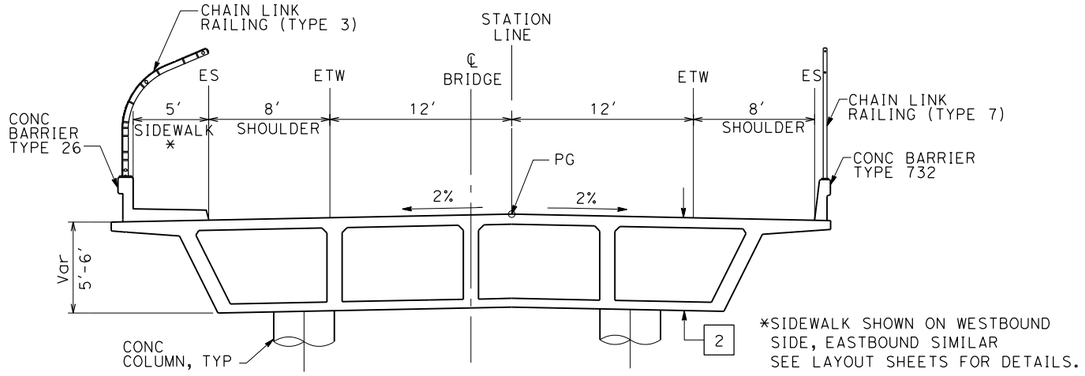
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NOTES:

1. DIMENSIONS OF EXISTING PAVEMENT WIDTHS ARE BASED ON MEASUREMENTS MADE IN THE FIELD AND ARE APPROXIMATE.
2. PAVEMENT SECTIONS ARE TO BE DETERMINED. GEOTECHNICAL INVESTIGATIONS WILL BE CONDUCTED IN A SUBSEQUENT PHASE TO DETERMINE STRUCTURAL SECTIONS FOR EACH CROSSING.
3. SPACING OF BENCHES ON PROPOSED FILL SECTIONS ARE TO BE DETERMINED.
4. RIGHT-OF-WAY (R/W) WIDTH IS FOR INFORMATION ONLY. EXACT WIDTH TO BE DETERMINED IN COORDINATION WITH AFFECTED AGENCY.



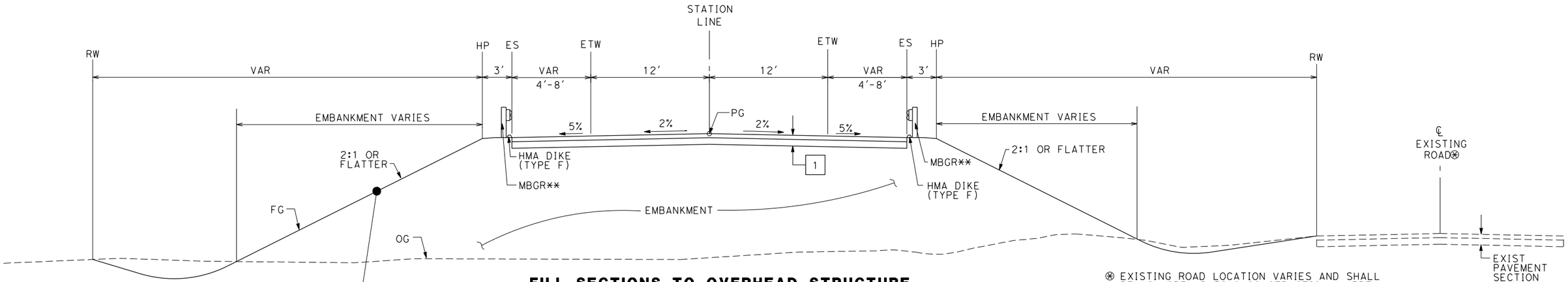

*SIDEWALK SHOWN ON WESTBOUND SIDE, EASTBOUND SIMILAR SEE LAYOUT SHEETS FOR DETAILS.

STRUCTURAL SECTIONS:

1. HMA TYPE A
   AB CLASS 2
2. CAST IN PLACE / PRESTRESSED BOX GIRDER (6′ STRUCTURE DEPTH)
3. AB CLASS 2

## OVERHEAD STRUCTURE

SEE STRUCTURAL PLANS

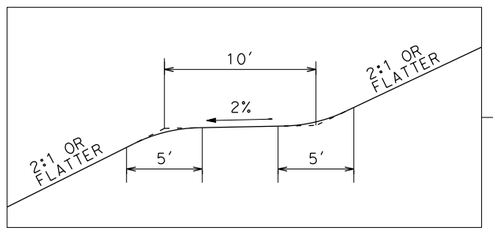



## FILL SECTIONS TO OVERHEAD STRUCTURE

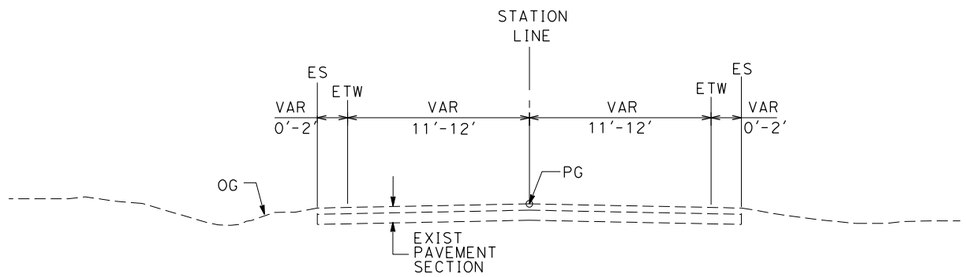
WEST SIDE SHOWN (EAST SIDE SIMILAR)

⊛ EXISTING ROAD LOCATION VARIES AND SHALL REMAIN OPEN DURING CONSTRUCTION. WHERE SHOWN ON THE PLAN CLOSE AND OBLITERATE EXISTING ROADWAY SUBSEQUENT TO CONSTRUCTION OF THE REALIGNED ROADWAY.

** EXACT LIMITS OF MBGR PER AGENCY REQUIREMENTS.




BENCHING DETAIL




## EXISTING LOCAL ROAD

WEST SIDE SHOWN (EAST SIDE SIMILAR)
SEE LAYOUT SHEETS FOR ACTUAL ROADWAY WIDTHS AT EACH CROSSING

TYPICAL CROSS SECTIONS ON THIS SHEET APPLY TO THE FOLLOWING ROADWAYS FOR ALIGNMENT A1, AVE 21 WYE:

| NO. | STREET NAME | | |
|---|---|---|---|
| 1 | WHITE ROCK RD | 12 | ROAD 22 |
| 2 | LE GRAND RD | 13 | ROAD 20 |
| 3 | S. FRESNO RD | 14 | ROAD 18.5 |
| 4 | S. CUNNINGHAM RD | 15 | ROAD 16 |
| 5 | PLAINSBURG RD | 16 | Avenue 22 |
| 6 | S. ARBOLEDA RD | | |
| 7 | S. ORCHARD RD. | | |
| 8 | AVENUE 21 | | |
| 9 | ROAD 24 | | |
| 10 | AVENUE 24 | | |
| 11 | AVENUE 22 | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY K. OAKS
DRAWN BY K. OAKS
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

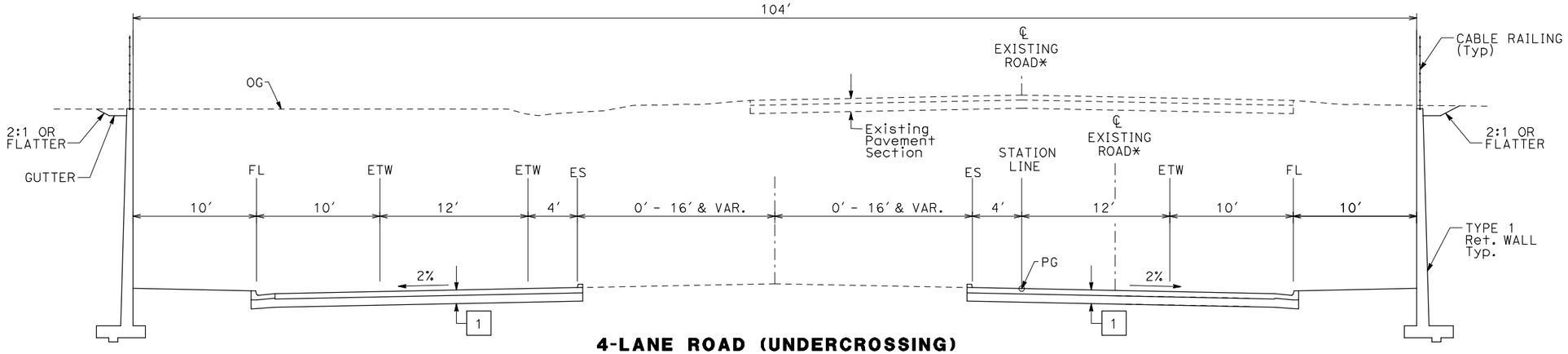

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
TYPICAL CROSS SECTIONS
GRADE SEPARATIONS
SHEET 1 OF 2

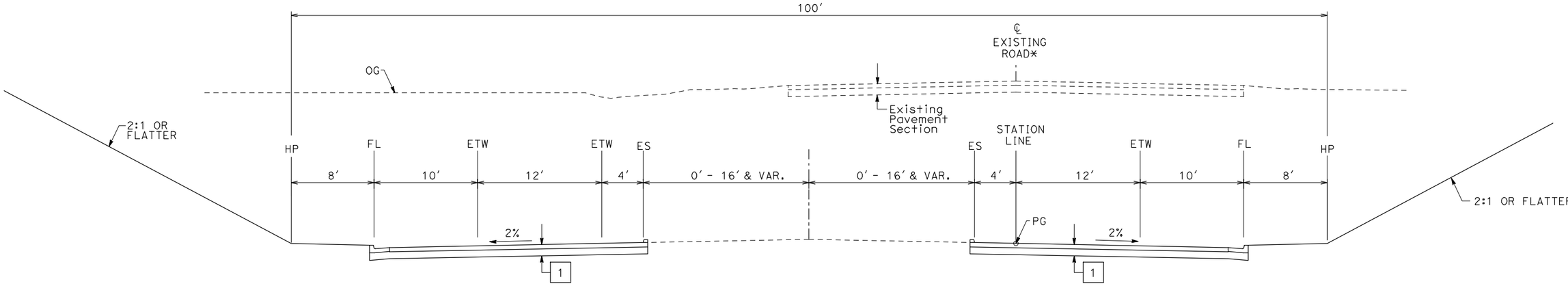
CONTRACT NO. HSR06-007
DRAWING NO. CT0121-A
SCALE NONE
SHEET NO. ### OF ###


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**4-LANE ROAD (UNDERCROSSING)**

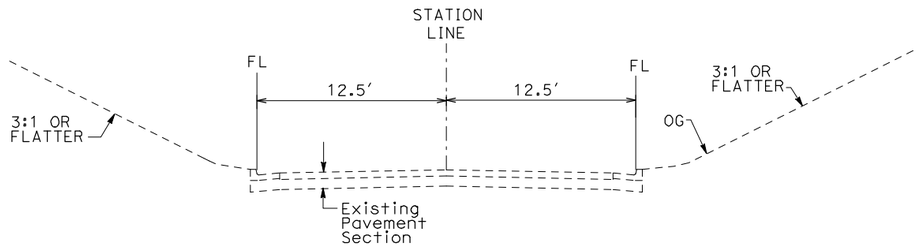
SEE STRUCTURAL PLANS




**4-LANE ROAD***

WEST SIDE SHOWN (EAST SIDE SIMILAR)

* EXISTING ROAD LOCATION VARIES. CONSTRUCTION SHALL BE STAGED TO KEEP ROAD OPEN DURING CONSTRUCTION.




**EXISTING 2-LANE ROAD**

EAST SIDE SHOWN (WEST SIDE SIMILAR)

TYPICAL CROSS SECTIONS ON THIS SHEET APPLY TO THE FOLLOWING ROADWAYS FOR ALIGNMENT A1:

| NO. | STREET NAME |
|---|---|
| 1 | ROAD 26 |
| 2 | AVENUE 24 |
| 3 | ROAD 22 |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: KO
DRAWN BY: FD
CHECKED BY: JZ
IN CHARGE: AB
DATE: 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

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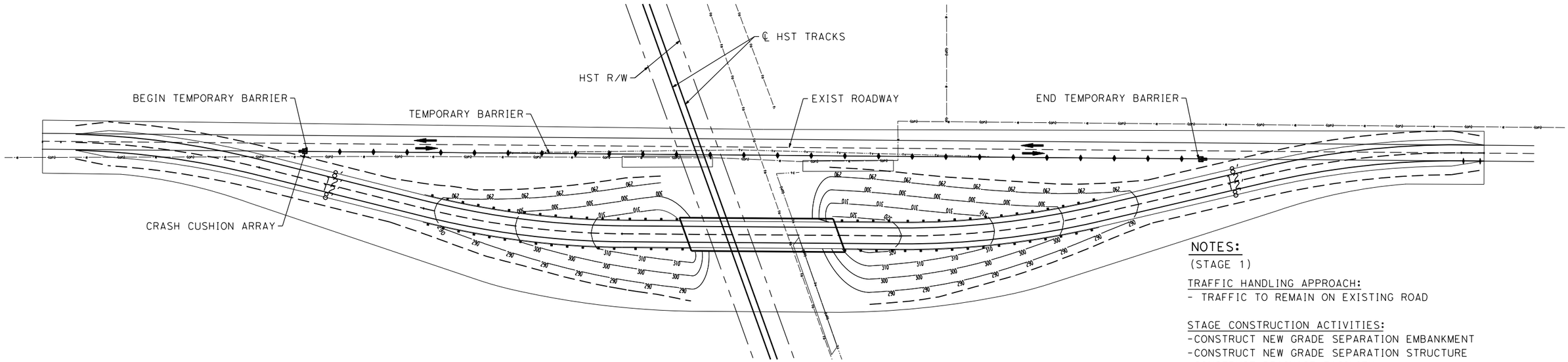
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF - AVE 21 WYE
TYPICAL CROSS SECTIONS
GRADE SEPARATIONS
SHEET 2 OF 2

CONTRACT NO.: HSR06-007
DRAWING NO.: CT0122-A
SCALE: NTS
SHEET NO.: ### OF ###

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GibsonR1

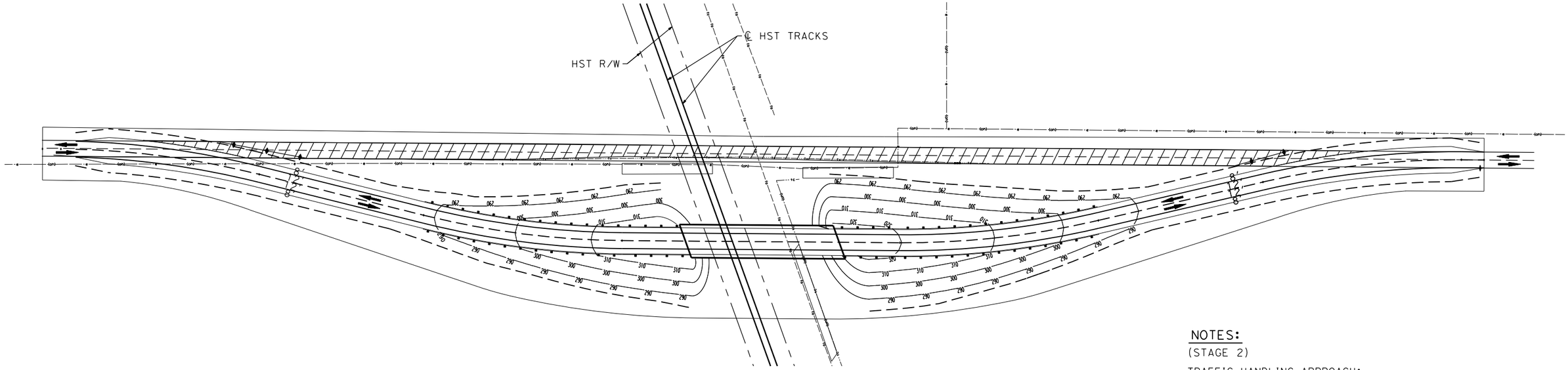



## STAGE CONSTRUCTION (STAGE 1)

NOTES:
(STAGE 1)

TRAFFIC HANDLING APPROACH:
- TRAFFIC TO REMAIN ON EXISTING ROAD

STAGE CONSTRUCTION ACTIVITIES:
-CONSTRUCT NEW GRADE SEPARATION EMBANKMENT
-CONSTRUCT NEW GRADE SEPARATION STRUCTURE
-CONSTRUCT DRAINAGE FACILITY




## STAGE CONSTRUCTION (STAGE 2)

NOTES:
(STAGE 2)

TRAFFIC HANDLING APPROACH:
- SHIFT TRAFFIC TO NEW GRADE SEPARATION FACILITY

STAGE CONSTRUCTION ACTIVITIES:
-CONSTRUCT REALIGNED ROAD CONFORMS
-COMPLETE DRAINAGE FACILITIES
-REMOVE BASE AND SURFACING OF EXIST ROAD

LEGEND:

- CRASH CUSHION ARRAY (ARRAY TS 11)
- TEMPORARY BARRIER (TYPE K)
- DIRECTION OF TRAVEL
- REMOVE BASE AND SURFACING (EXIST ROAD)

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: SW
DRAWN BY: SW/FD
CHECKED BY: JZ
IN CHARGE: AB
DATE: 07/27/2011

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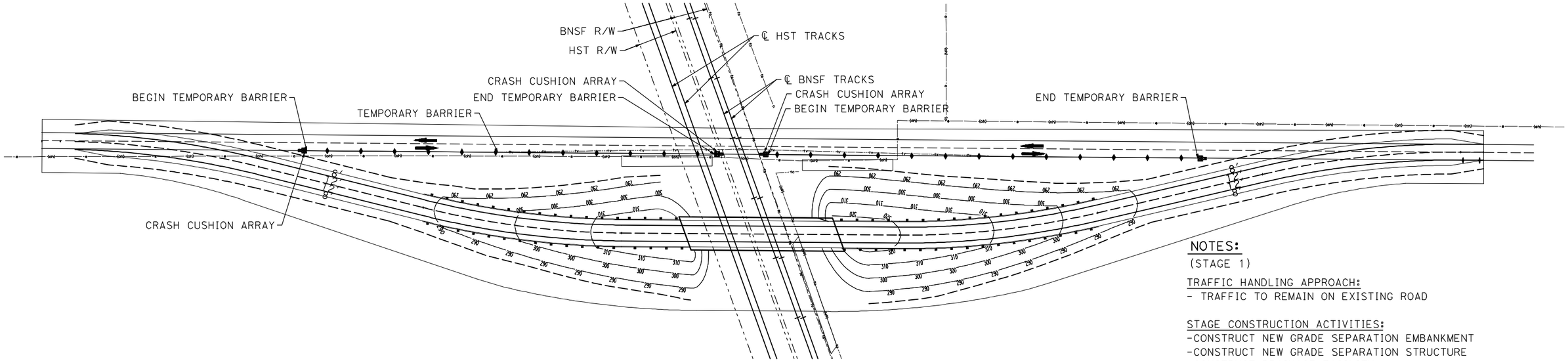
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF - AVE 21 WYE
GENERAL STAGE CONSTRUCTION &
TRAFFIC HANDLING APPROACH
SHEET 1 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. CT5000-A
SCALE NO SCALE
SHEET NO. ### OF ###

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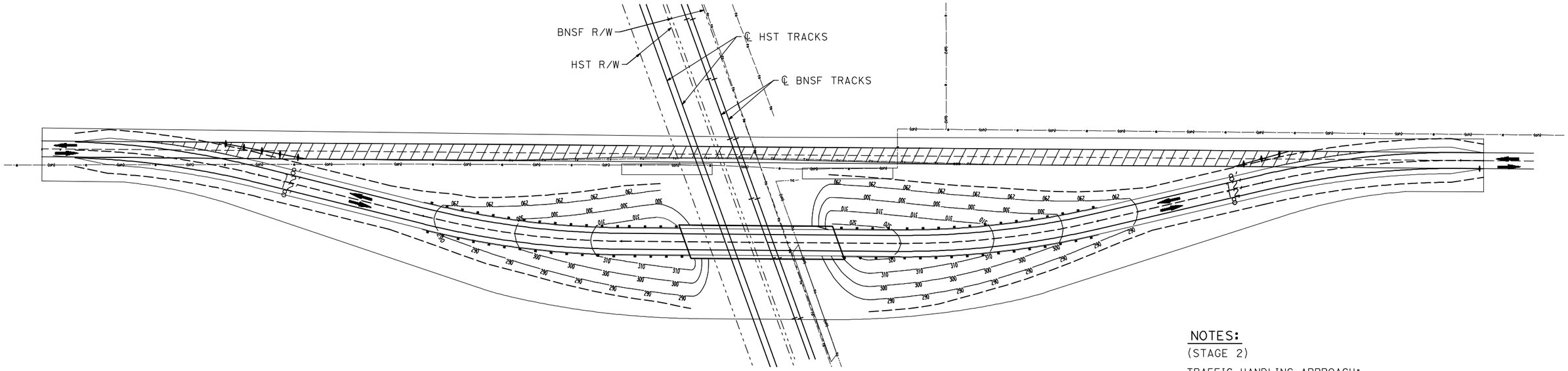



## STAGE CONSTRUCTION (STAGE 1)

NOTES:
(STAGE 1)

TRAFFIC HANDLING APPROACH:
- TRAFFIC TO REMAIN ON EXISTING ROAD

STAGE CONSTRUCTION ACTIVITIES:
-CONSTRUCT NEW GRADE SEPARATION EMBANKMENT
-CONSTRUCT NEW GRADE SEPARATION STRUCTURE
-CONSTRUCT DRAINAGE FACILITY




## STAGE CONSTRUCTION (STAGE 2)

NOTES:
(STAGE 2)

TRAFFIC HANDLING APPROACH:
- SHIFT TRAFFIC TO NEW GRADE SEPARATION FACILITY

STAGE CONSTRUCTION ACTIVITIES:
-CONSTRUCT REALIGNED ROAD CONFORMS
-COMPLETE DRAINAGE FACILITIES
-REMOVE SURFACE AND BASE OF EXIST ROAD

LEGEND:

- CRASH CUSHION ARRAY (ARRAY TS11)
- TEMPORARY BARRIER (TYPE K)
- DIRECTION OF TRAVEL
- REMOVE BASE AND SURFACING (EXIST ROAD)

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: SW
DRAWN BY: SW/FD
CHECKED BY: JZ
IN CHARGE: AB
DATE: 04/29/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF - AVE 21 WYE
GENERAL STAGE CONSTRUCTION &
TRAFFIC HANDLING APPROACH
SHEET 2 OF 2

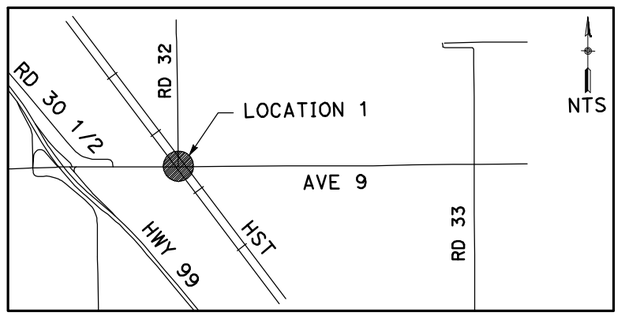
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SCALE NO SCALE
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
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| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1000-A THROUGH CT1002-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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**15% DESIGN SUBMITTAL**

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Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

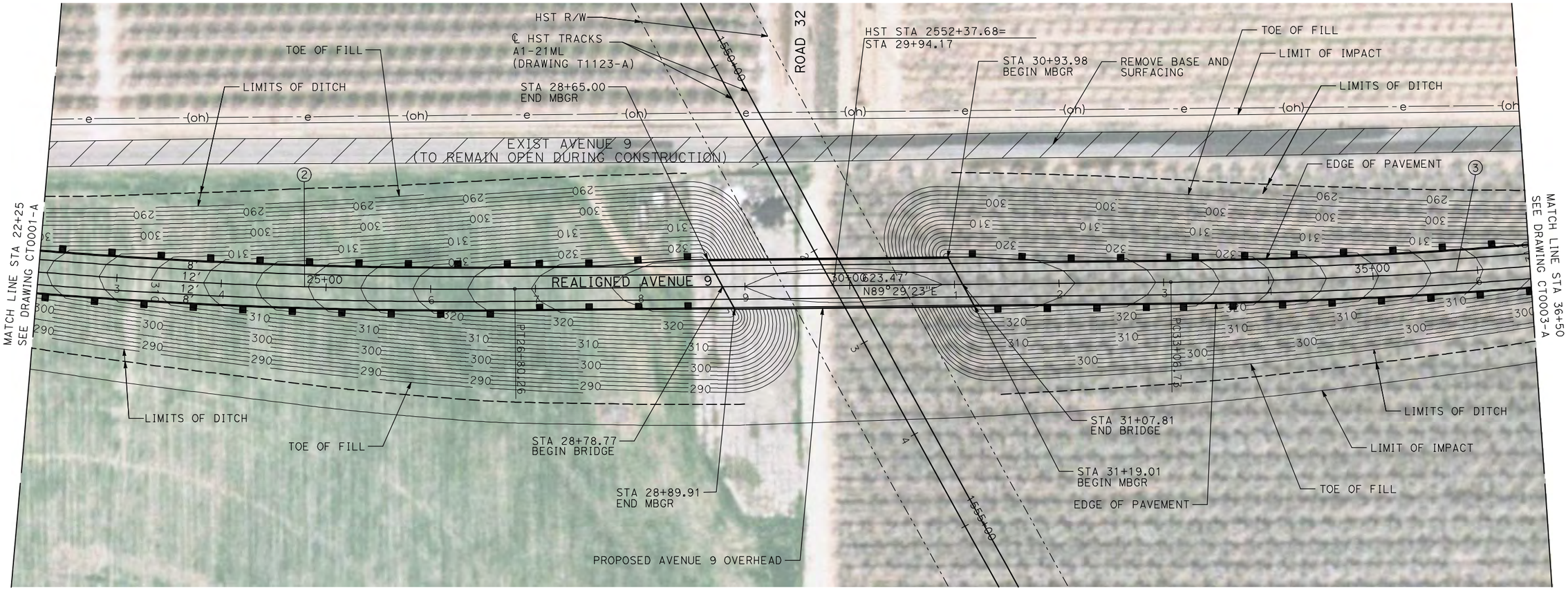
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 9
LAYOUT
SHEET 1 OF 3

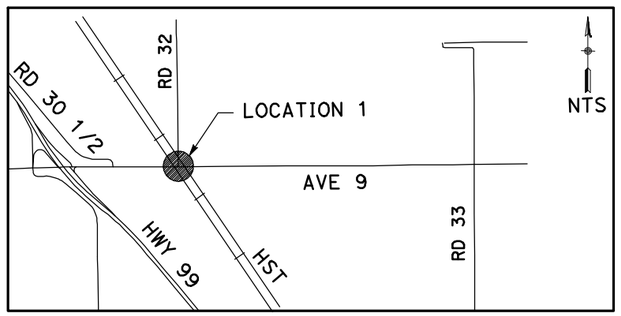
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SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
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| ③ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1000-A THROUGH CT1002-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

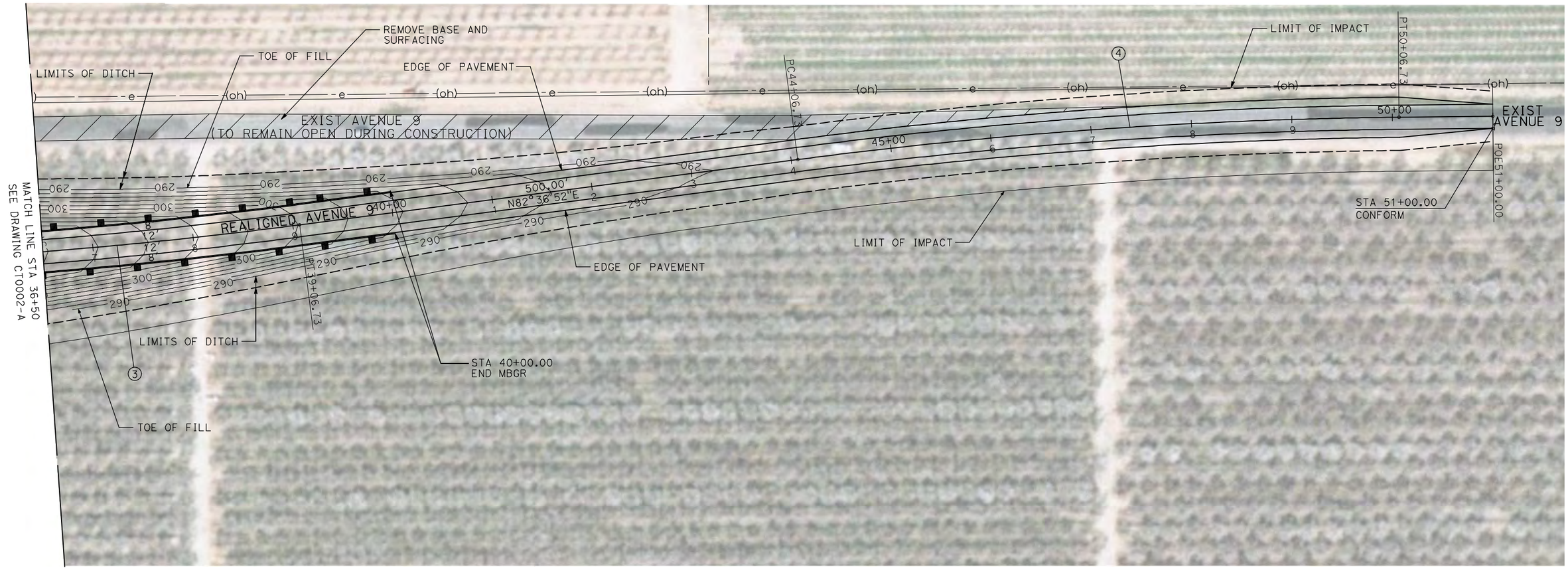
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 9
LAYOUT
SHEET 2 OF 3

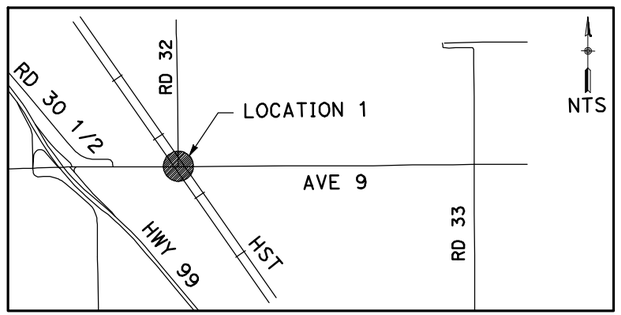
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SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

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| ④ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1000-A THROUGH CT1002-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 9
LAYOUT
SHEET 3 OF 3

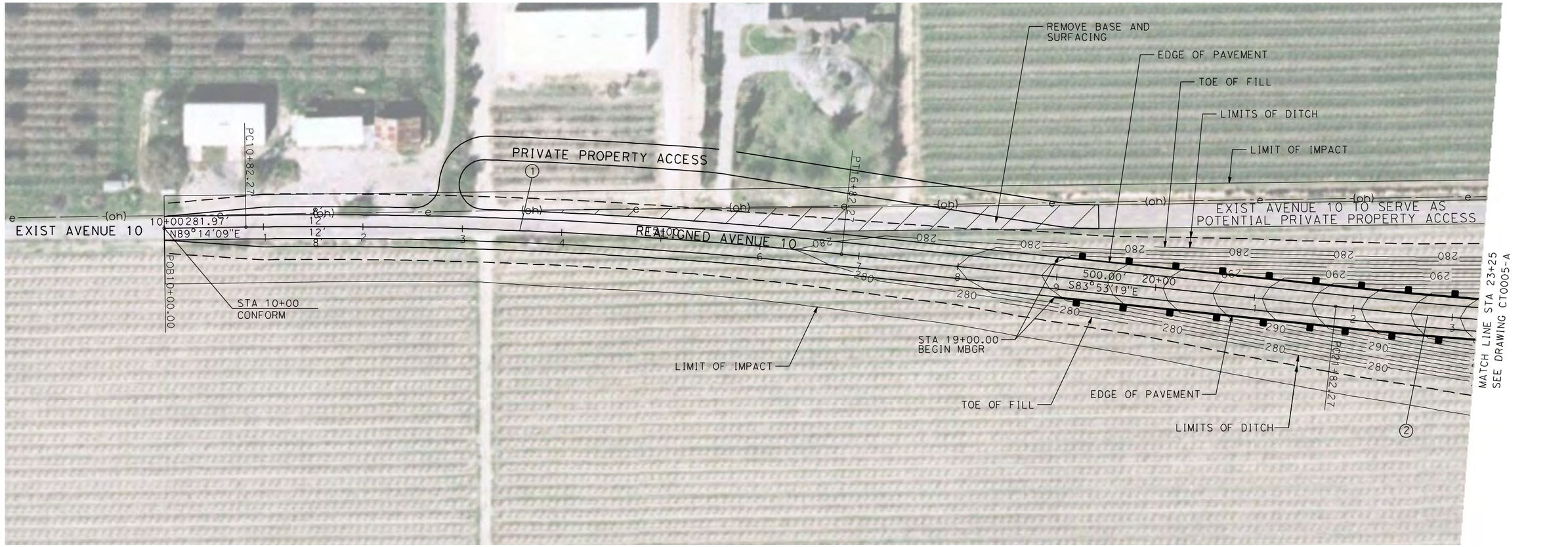
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SHEET NO. ### OF ###

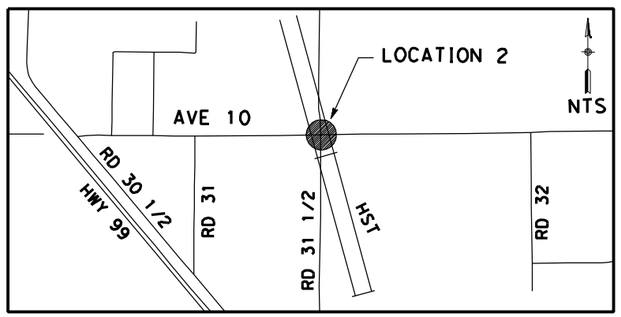
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GibsonR1

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CURVE DATA

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NOTE:

1. FOR PROFILES, SEE DRAWINGS CT1003-A THROUGH CT1005-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

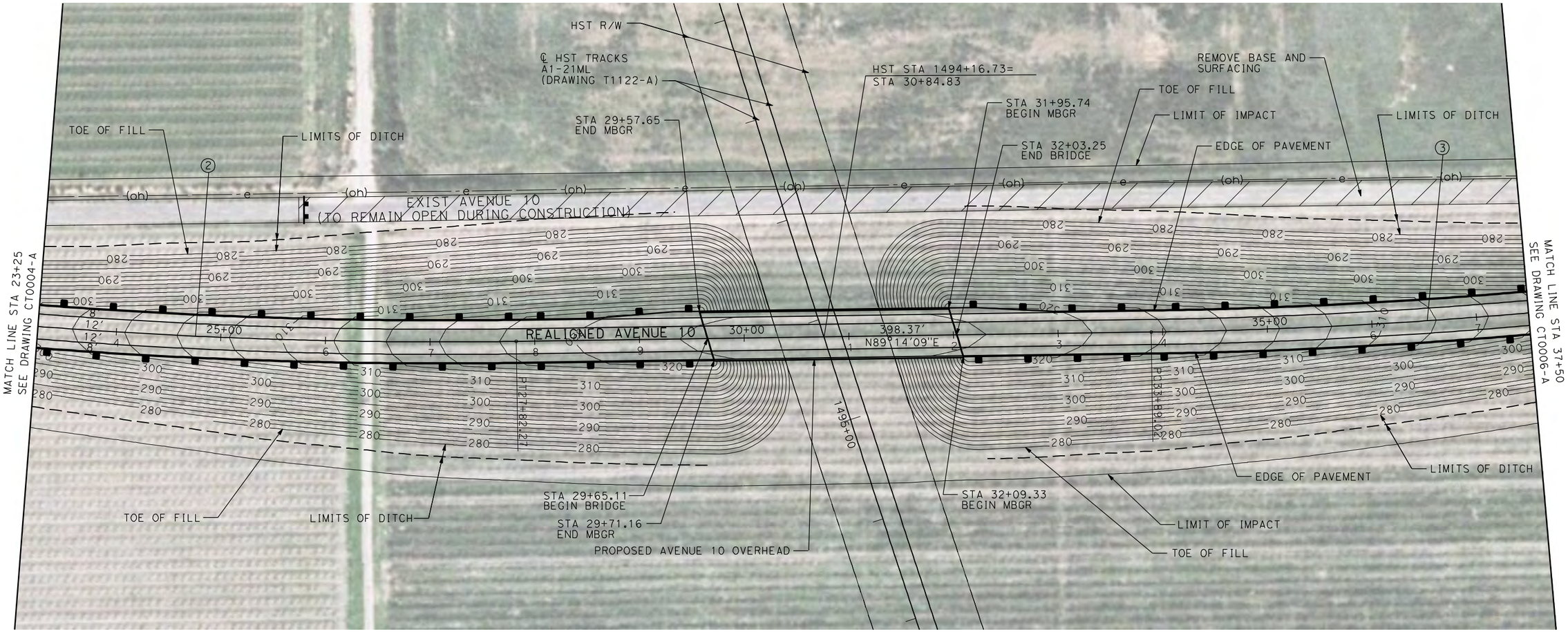
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 10
LAYOUT
SHEET 1 OF 3

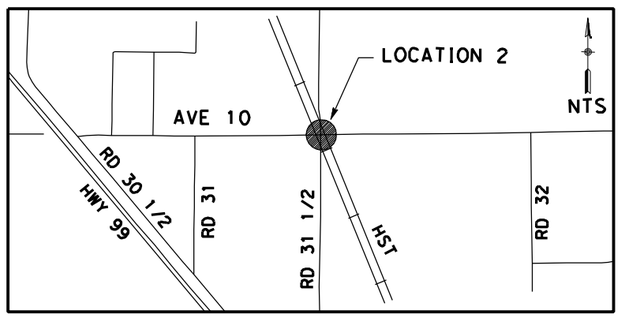
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SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

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NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1003-A THROUGH CT1005-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
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CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

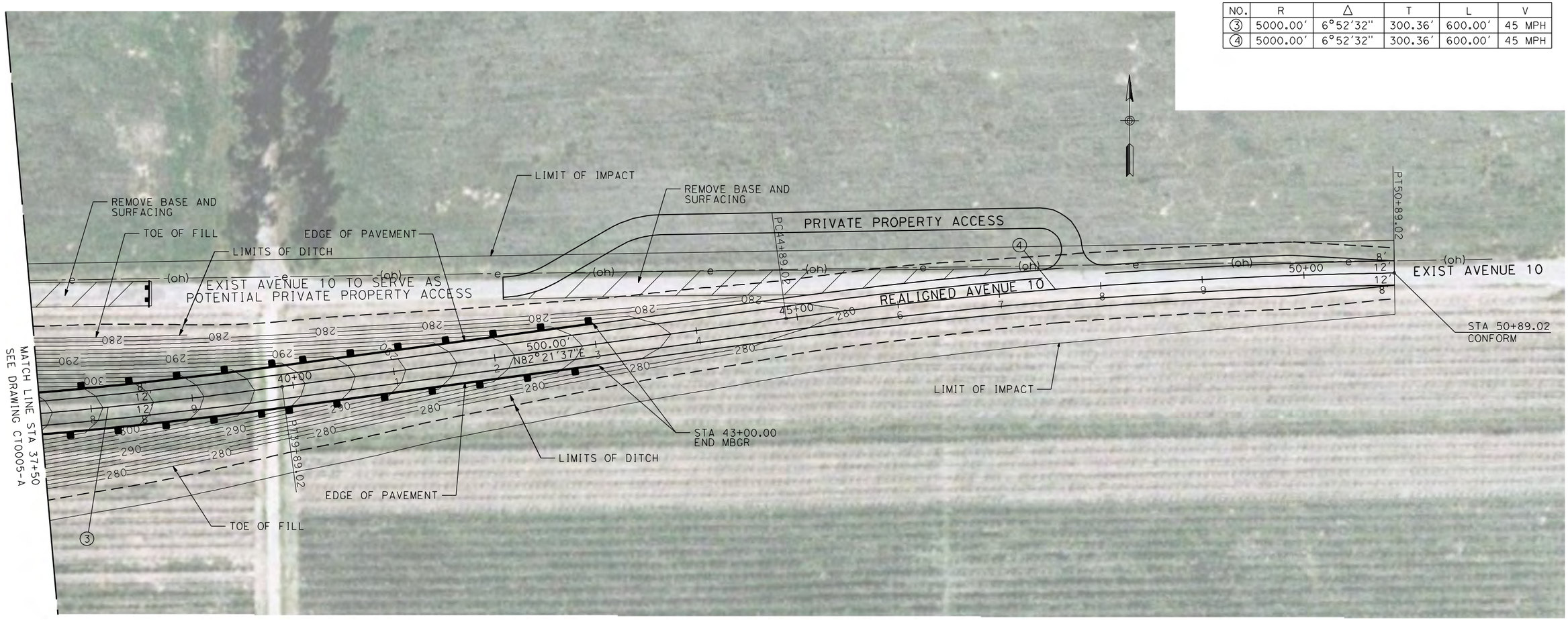
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 10
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0005-A
SCALE AS SHOWN
SHEET NO. ### OF ###

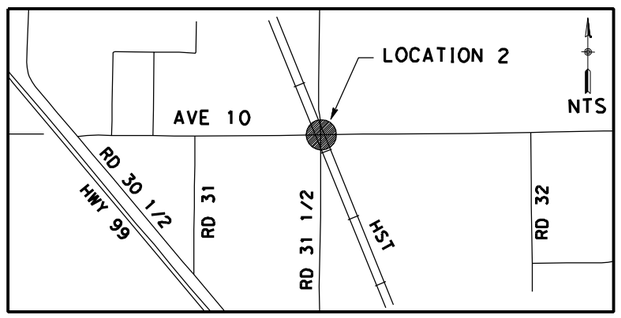
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| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |
| ④ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1003-A THROUGH CT1005-A.




50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

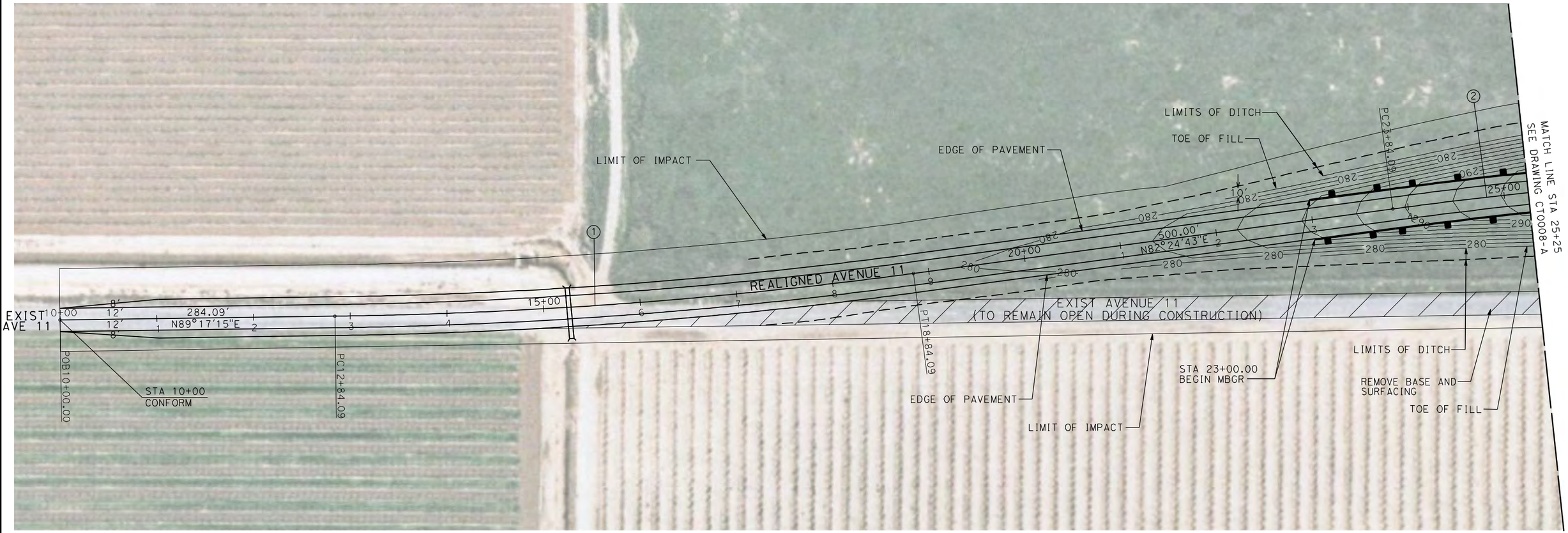
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 10
LAYOUT
SHEET 3 OF 3

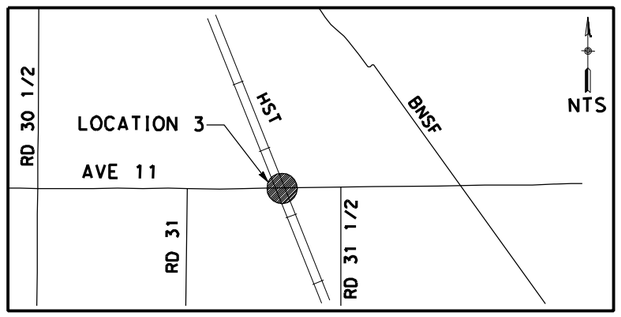
CONTRACT NO. HST06-007
DRAWING NO. CT0006-A
SCALE AS SHOWN
SHEET NO. ### OF ###

1/10/2012 3:56:31 PM I:\cnsr\60022962\task-03_merced-fresno\cadd\civil\design\gibsonr\rev 1 - 15% plans\cadd\sheet\plans\a1 MF-CT-0006-A_REV1.dgn
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1006-A THROUGH CT1008-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

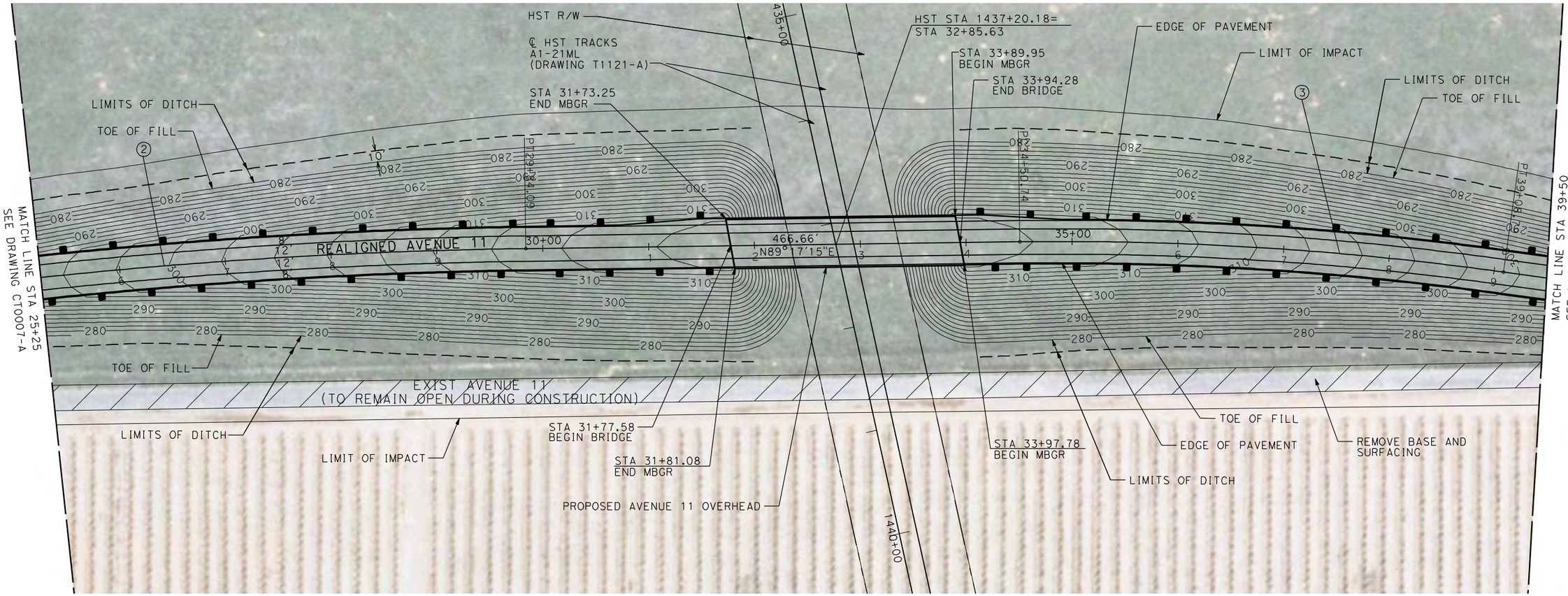
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 11
LAYOUT
SHEET 1 OF 3

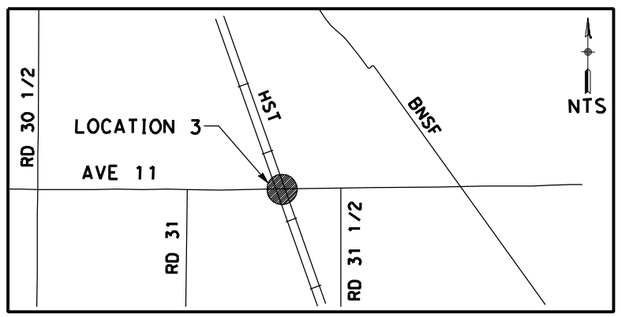
CONTRACT NO. HST06-007
DRAWING NO. CT0007-A
SCALE AS SHOWN
SHEET NO. ### OF ###

i:\chsr\60022962\task-03_merced-fresno\cadd\civil\design\gibsonr\rev 1 - 15% plans\cadd\sheet\plans\a1 MF-CT-0007-A_REV1.dgn
1/10/2012 3:56:23 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ③ | 3000.00′ | 8°44′53" | 229.47′ | 458.05′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1006-A THROUGH CT1008-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

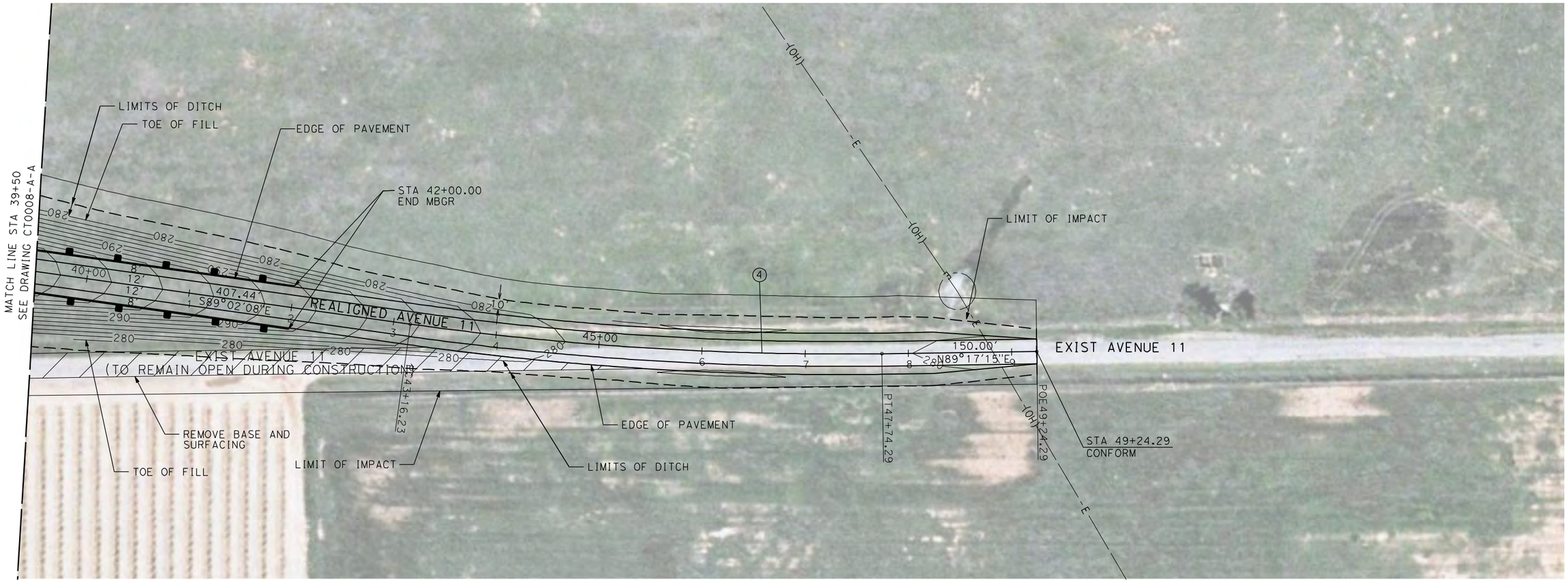
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 11
LAYOUT
SHEET 2 OF 3

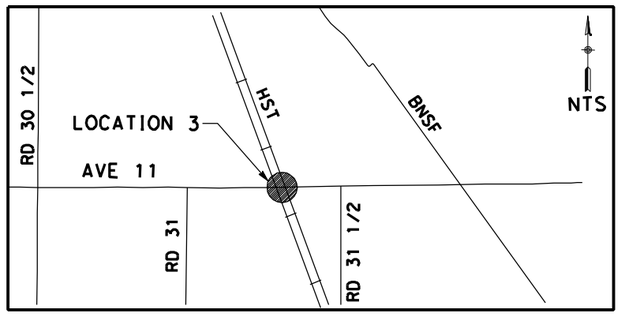
CONTRACT NO. HST06-007
DRAWING NO. CT0008-A
SCALE AS SHOWN
SHEET NO. ### OF ###

1/10/2012 3:56:13 PM i:\chsr\6002962\task-03_merced-fresno\cadd\civil\design\gibsonr\rev 1 - 15% plans\cadd\sheet\plans\a1\MF-CT-0008-A_REV1.dgn
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00' | 8°44'53" | 229.47' | 458.05' | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1006-A THROUGH CT1008-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

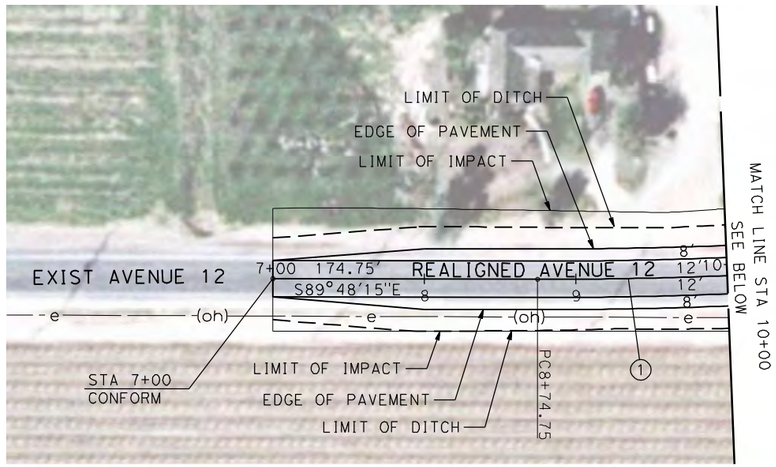
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 11
LAYOUT
SHEET 3 OF 3

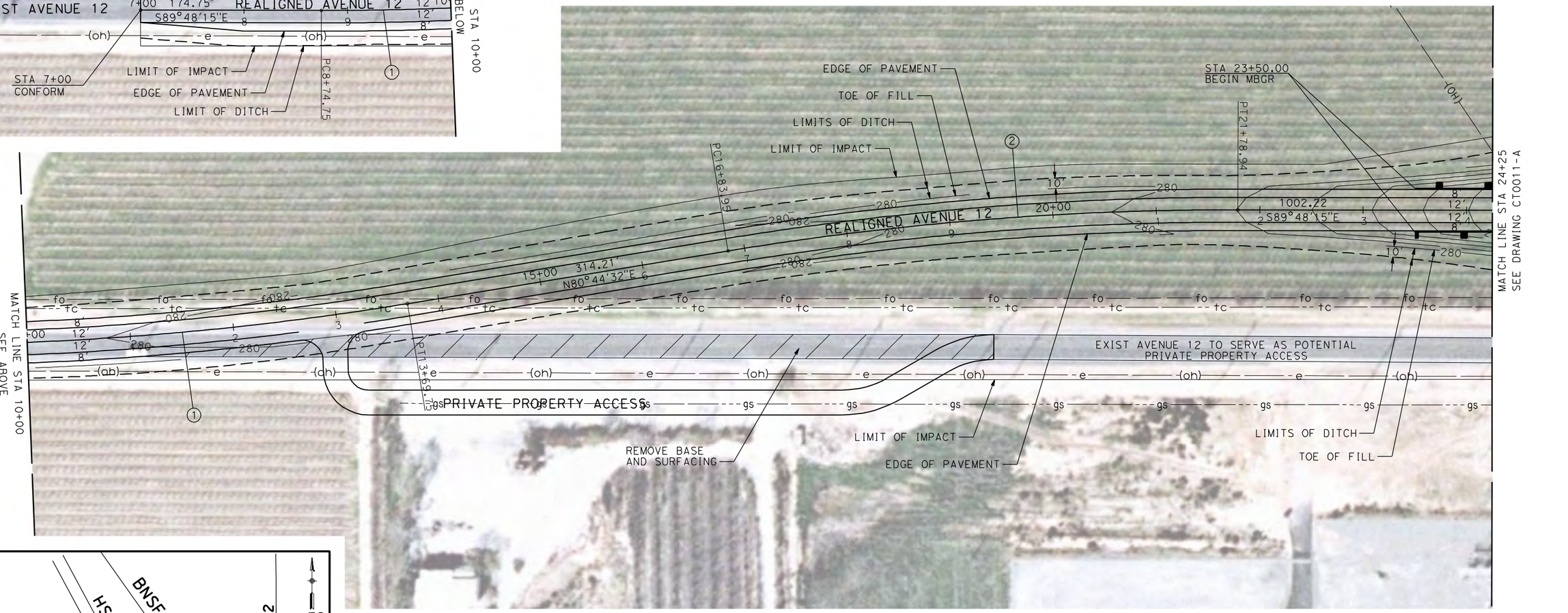
CONTRACT NO. HST06-007
DRAWING NO. CT0009-A
SCALE AS SHOWN
SHEET NO. ### OF ###

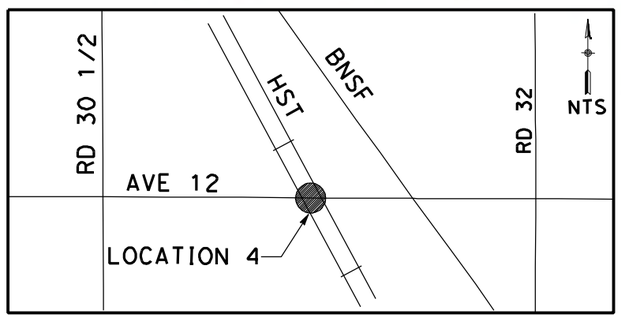
1/10/2012 3:56:05 PM i:\cnsr\60022962\task-03_merced-fresno\cadd\civil\design\gibsonr\rev 1 - 15% plans\cadd\sheet\plans\a1\MF-CT-0009-A_REV1.dgn
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°27′13" | 248.06′ | 494.99′ | 45 MPH |
| ② | 3000.00′ | 9°27′13" | 248.06′ | 494.99′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1009-A THROUGH CT1011-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 12
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0010-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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1/10/2012 3:55:57 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |
| | | | | | |

HST R/W

℄ HST TRACKS
A1-21ML
(DRAWING T1120-A)

LIMITS OF DITCH
TOE OF FILL
EDGE OF PAVEMENT
LIMIT OF IMPACT

STA 30+67.51
END MBGR

HST STA 1384+77.14=
STA 31+90.07

STA 32+96.36
BEGIN MBGR

STA 33+04.74
END BRIDGE

LIMITS OF DITCH
EDGE OF PAVEMENT
LIMIT OF IMPACT
TOE OF FILL

PC 34+94.64

MATCH LINE STA 24+25
SEE DRAWING CT0010-A

MATCH LINE STA 38+50
SEE DRAWING CT0012-A

25+00 30+00 35+00

1315.7' REALIGNED AVENUE 12
S89°48'15"E

1385+00

EXIST AVENUE 12 TO SERVE AS
POTENTIAL PRIVATE PROPERTY ACCESS

EXIST AVENUE 12 TO SERVE AS
POTENTIAL PRIVATE PROPERTY ACCESS

LIMIT OF IMPACT
LIMITS OF DITCH
TOE OF FILL
EDGE OF PAVEMENT

STA 30+75.94
BEGIN BRIDGE

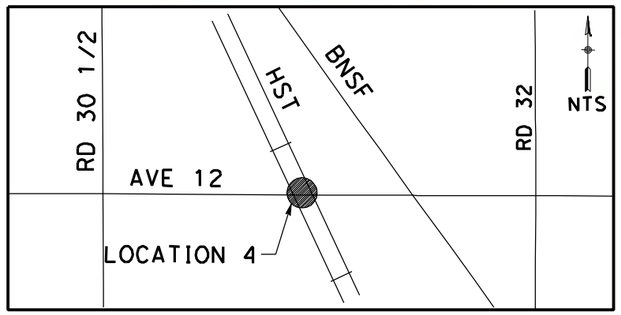
STA 30+82.73
END MBGR

PROPOSED AVENUE 12 OVERHEAD

STA 33+11.49
BEGIN MBGR

REMOVE BASE
AND SURFACING

TOE OF FILL
LIMIT OF IMPACT
EDGE OF PAVEMENT
LIMITS OF DITCH




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1009-A THROUGH CT1011-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

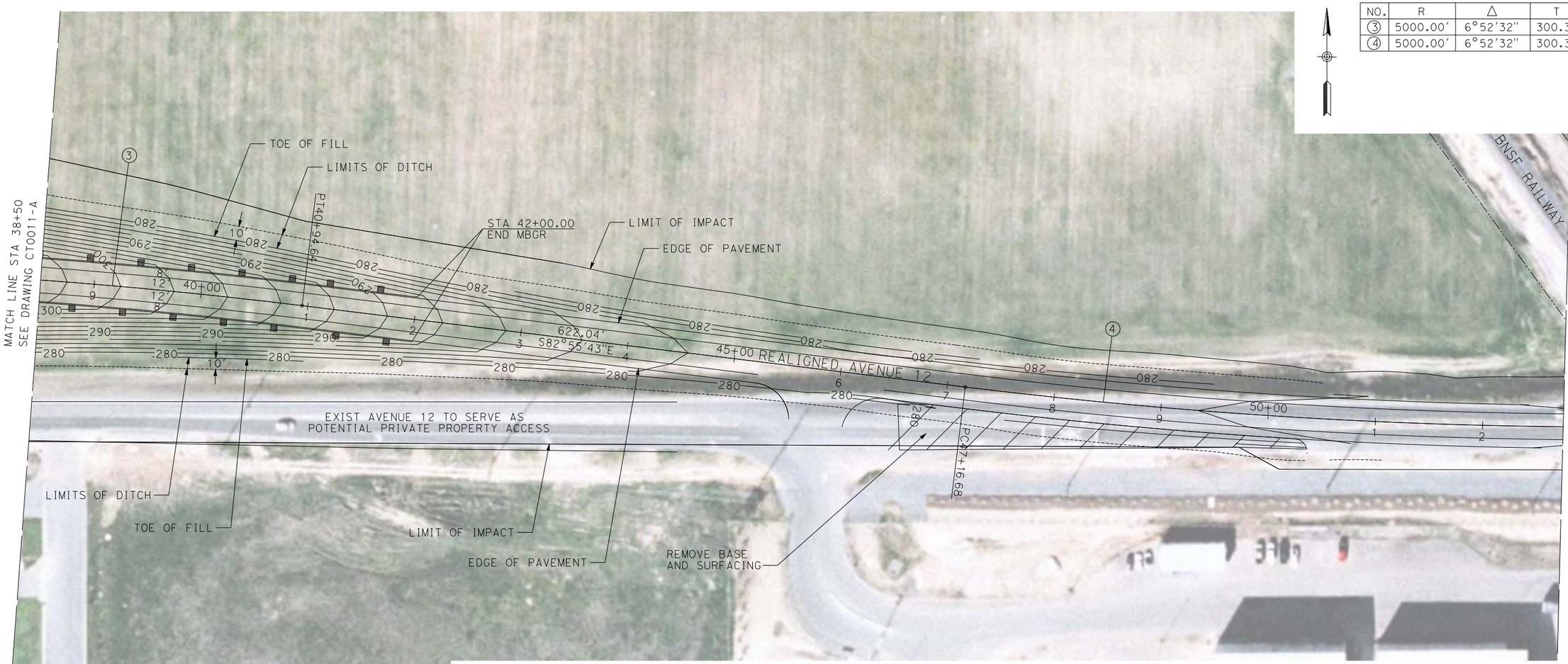
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

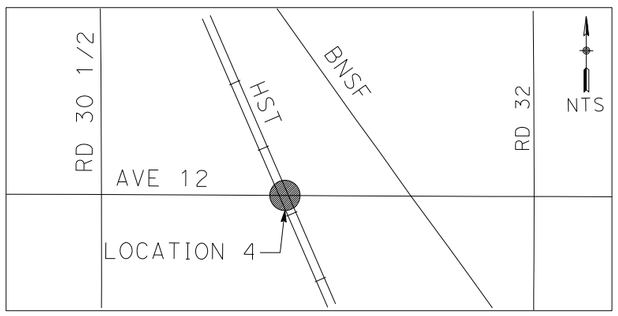
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 12
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0011-A
SCALE AS SHOWN
SHEET NO. ### OF ###

GibsonR1 1/10/2012 3:55:46 PM i:\chsr\6002962\task-03_merced-fresno\cadd\civil\design\gibsonr\rev 1 - 15% plans\cadd\sheet\plans\a1\MF-CT-0011-A_REV1.dgn

| CURVE DATA | | | | | |
|---|---|---|---|---|---|
| NO. | R | Δ | T | L | V |
| ③ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ④ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |







50 0 50 100
1"=50′

NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1009-A THROUGH CT1011-A.

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 02/17/2012

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 12
LAYOUT
SHEET 3 OF 3

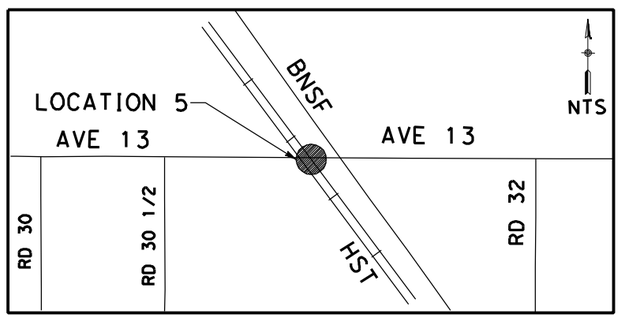
CONTRACT NO. HST06-007
DRAWING NO. CT0012-A
SCALE AS SHOWN
SHEET NO. OF ###

gibsonr1 4/6/2012 2:03:19 PM I:\CHSR\60022962\Task-03_Merced-Fresno\500 Submittals\501 In Progress Draft Submittal\501.1 Deliverable 1\ELECTONIC SUBMITTAL 3-1-2012\ROADWAY OPT 1\SHEET\Hybrid\Vol

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |
| ② | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1012-A THROUGH CT1014-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

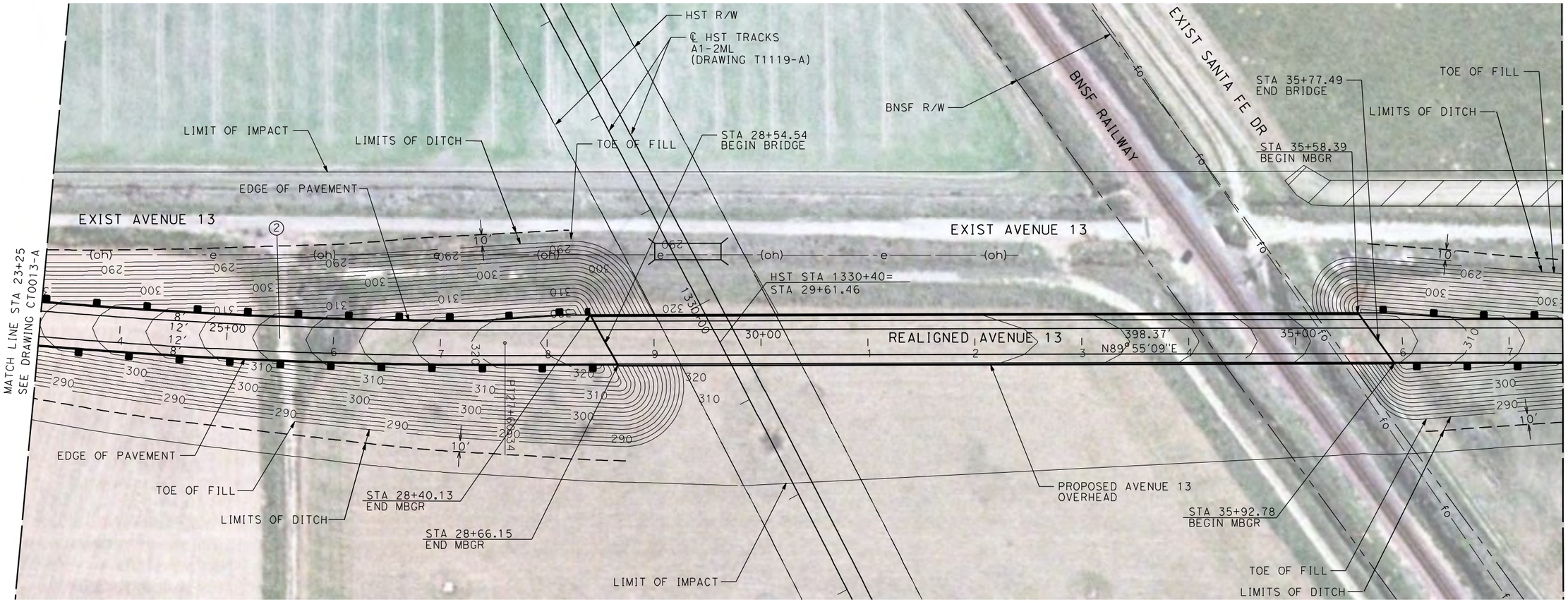
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 13
LAYOUT
SHEET 1 OF 4

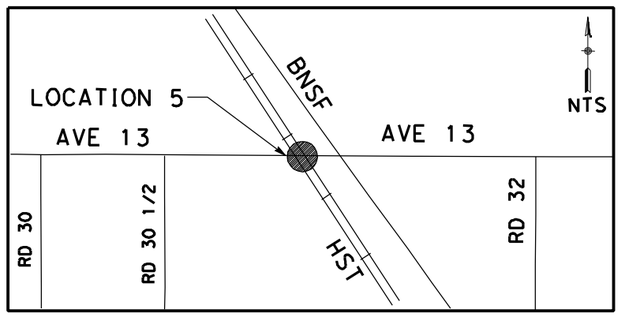
CONTRACT NO. HST06-007
DRAWING NO. CT0013-A
SCALE AS SHOWN
SHEET NO. ### OF ###

GibsonR1 1/10/2012 3:55:29 PM I:\cher\60022962\task-03_merced-fresno\cadd\civil\design\gibsonr\rev 1 - 15% plans\cadd\sheet\plans\a1 MF-CT-0013-A_REV1.dgn

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00′ | 6°52′32″ | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1012-A THROUGH CT1014-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

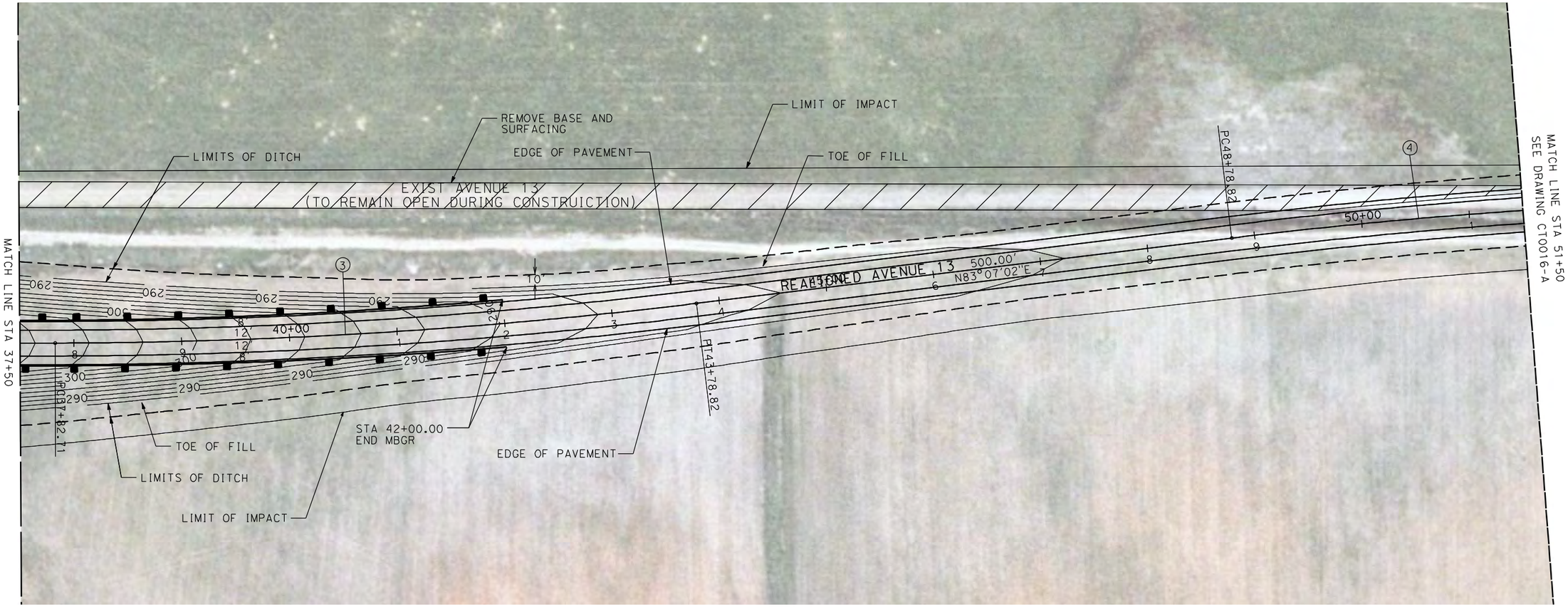
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 13
LAYOUT
SHEET 2 OF 4

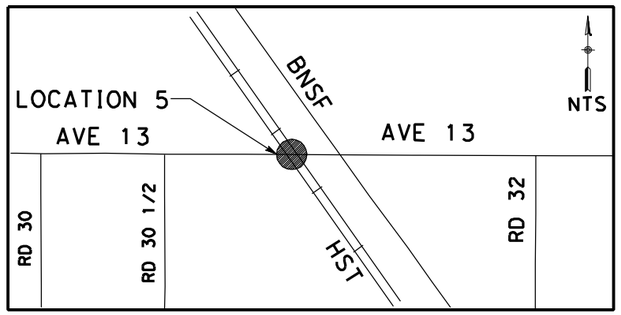
CONTRACT NO. HST06-007
DRAWING NO. CT0014-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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1/10/2012 3:55:19 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 5000.00' | 6°49'51" | 298.41' | 596.11' | 45 MPH |
| ④ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1012-A THROUGH CT1014-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 13
LAYOUT
SHEET 3 OF 4

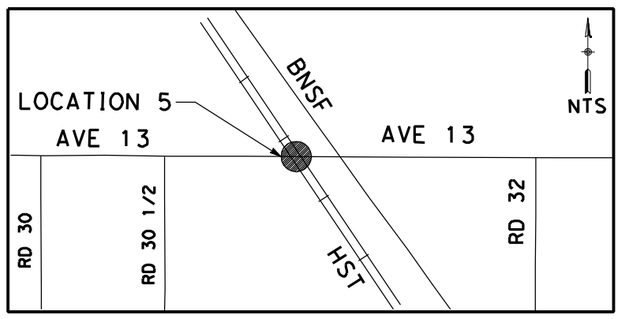
CONTRACT NO. HST06-007
DRAWING NO. CT0015-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1012-A THROUGH CT1014-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 13
LAYOUT
SHEET 4 OF 4

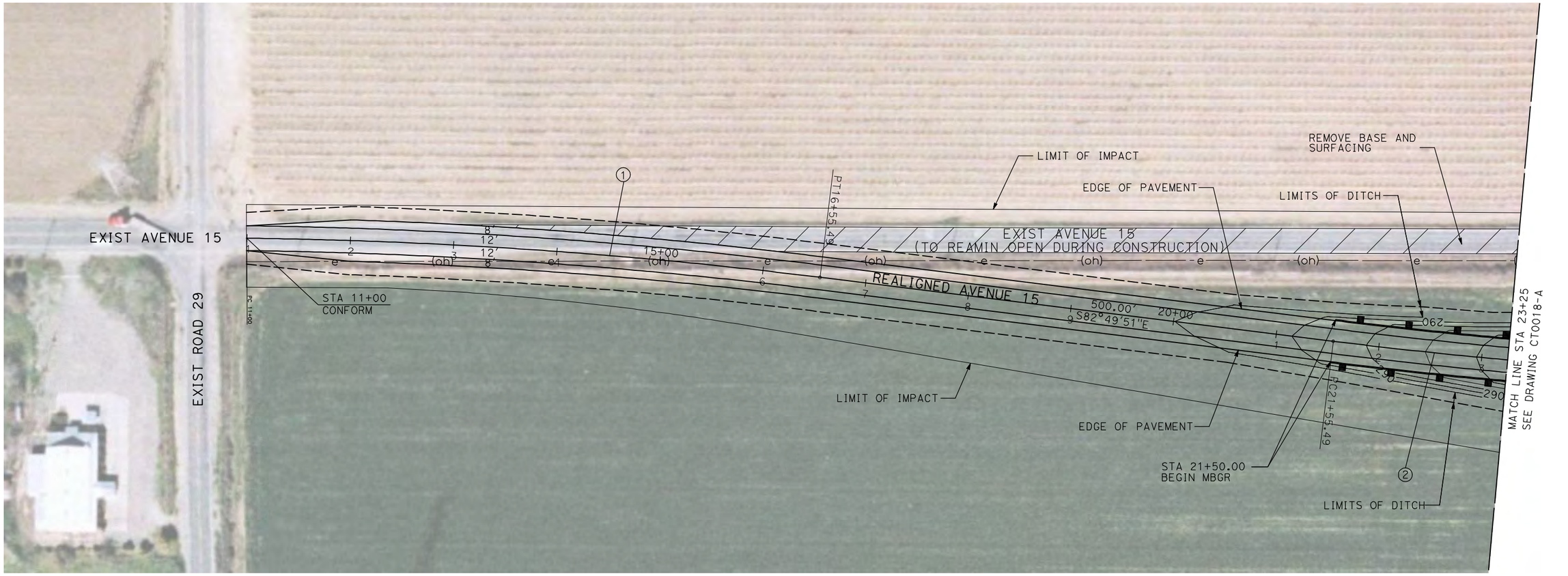
CONTRACT NO. HST06-007
DRAWING NO. CT0016-A
SCALE AS SHOWN
SHEET NO. ### OF ###

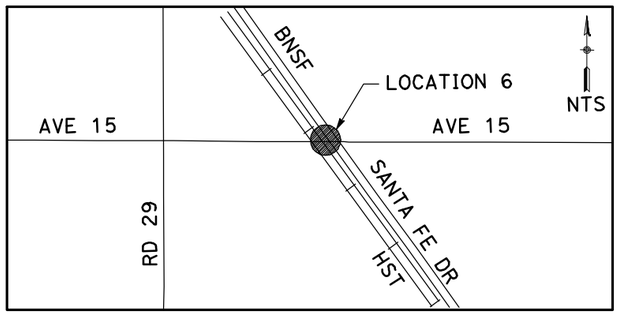
1/10/2012 3:55:04 PM i:\chsr\60022962\task-03_merced-fresno\cadd\civil\design\gibsonr\rev 1 - 15% plans\cadd\sheet\plans\a1 MF-CT-0016-A_REV1.dgn
GibsonR1

I:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0017-A.dgn
4/29/2011 1:53:29 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1015-A THROUGH CT1017-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

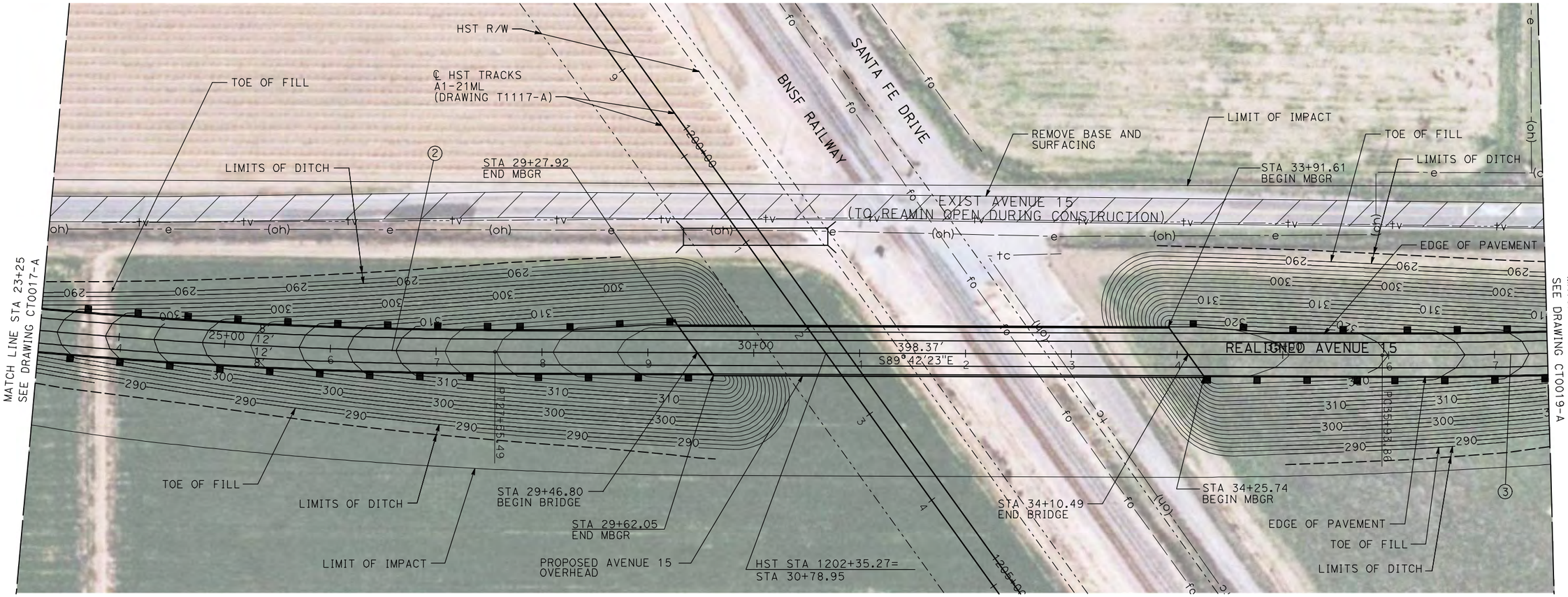
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

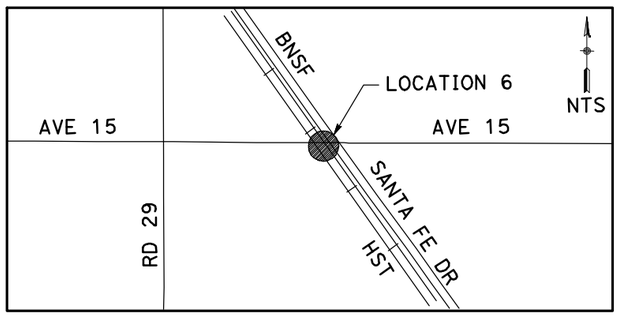
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0017-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ③ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1015-A THROUGH CT1017-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
15% DESIGN
SUBMITTAL

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CONSTRUCTION

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

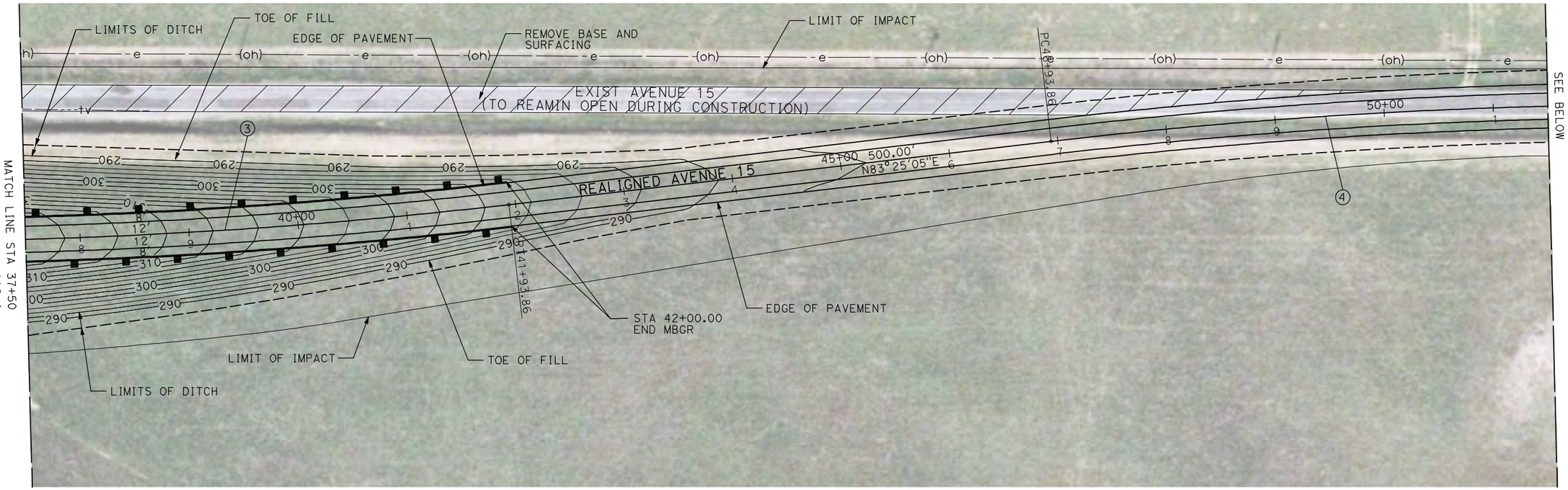
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0018-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

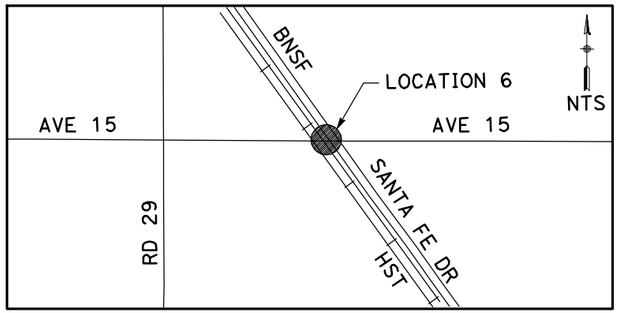
CURVE DATA

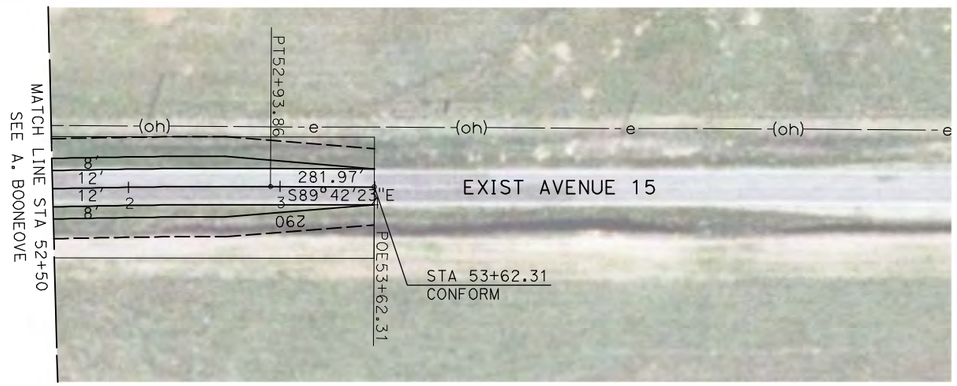
| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ④ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1015-A THROUGH CT1017-A.




50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**


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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

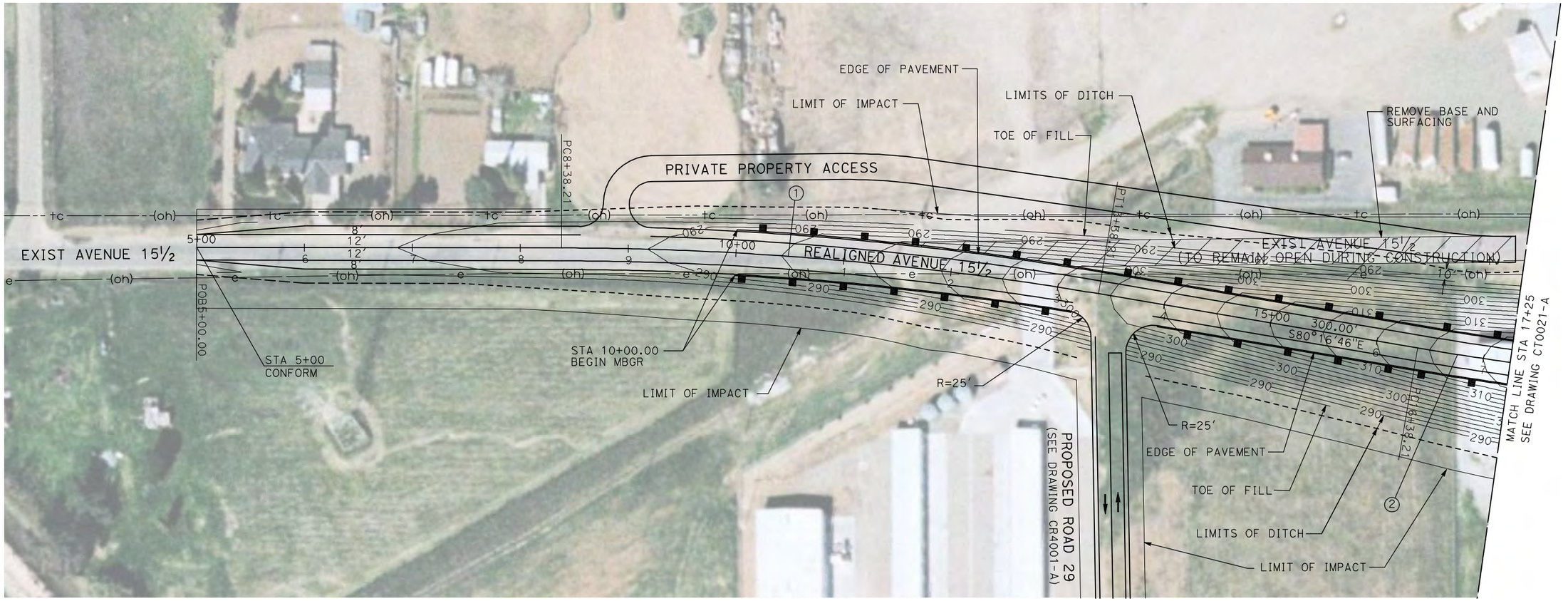
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15
LAYOUT
SHEET 3 OF 3

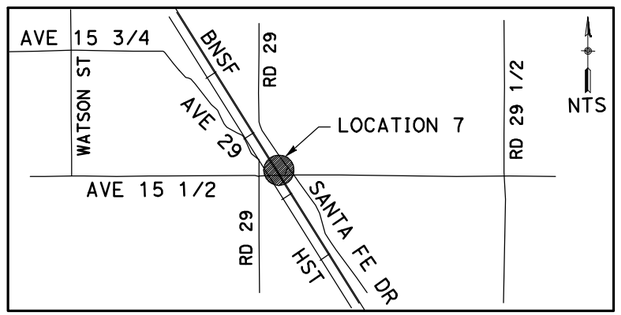
CONTRACT NO. HST06-007
DRAWING NO. CT0019-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1018-A THROUGH CT1020-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**
**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

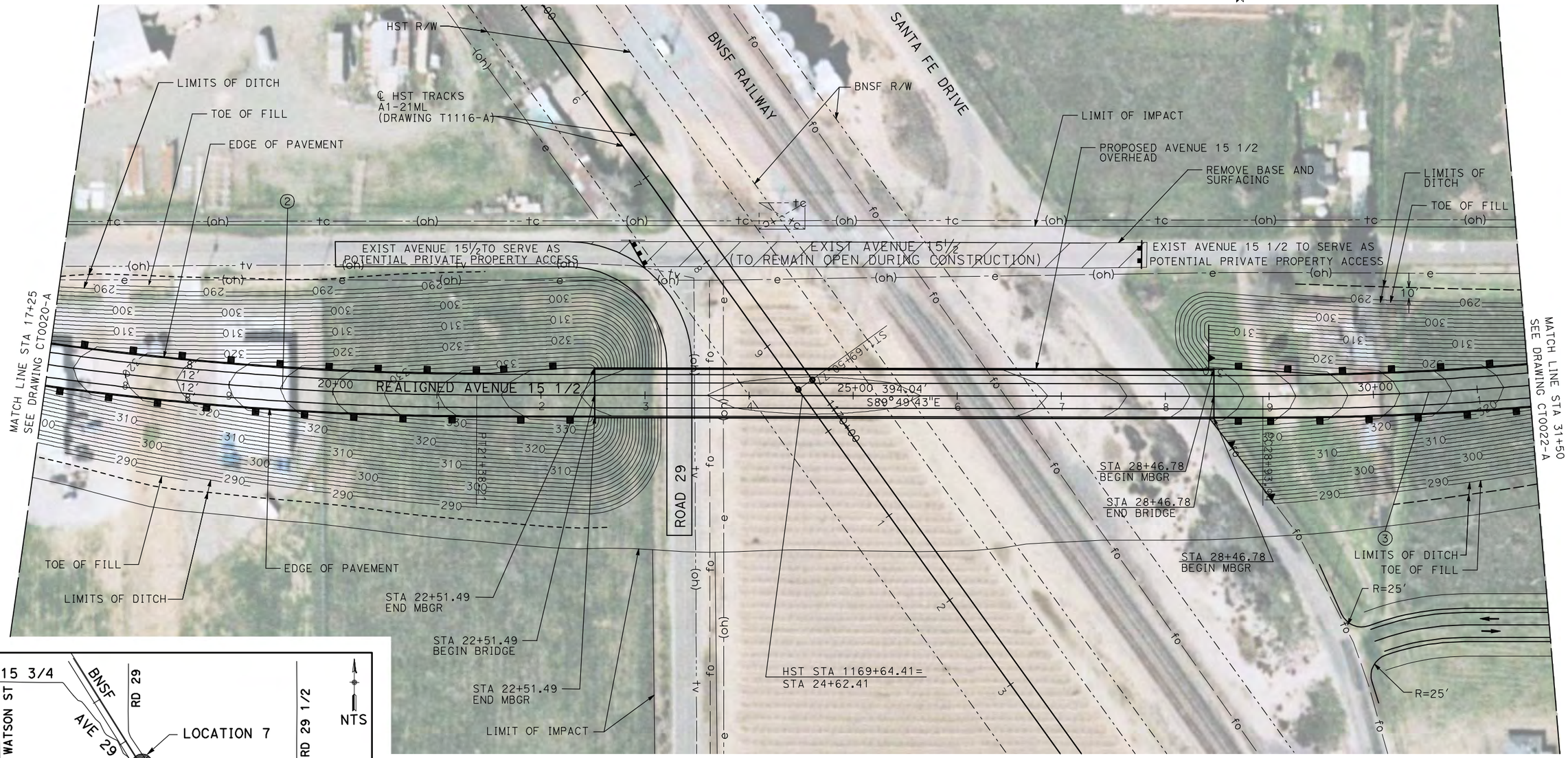
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15 1/2
LAYOUT
SHEET 1 OF 3

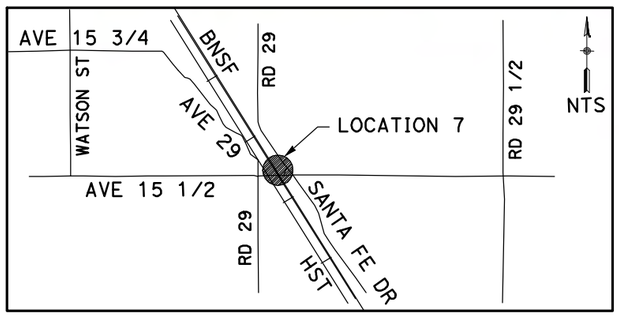
CONTRACT NO. HST06-007
DRAWING NO. CT0020-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1018-A THROUGH CT1020-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
15% DESIGN SUBMITTAL

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2020 L Street, Suite 300
Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

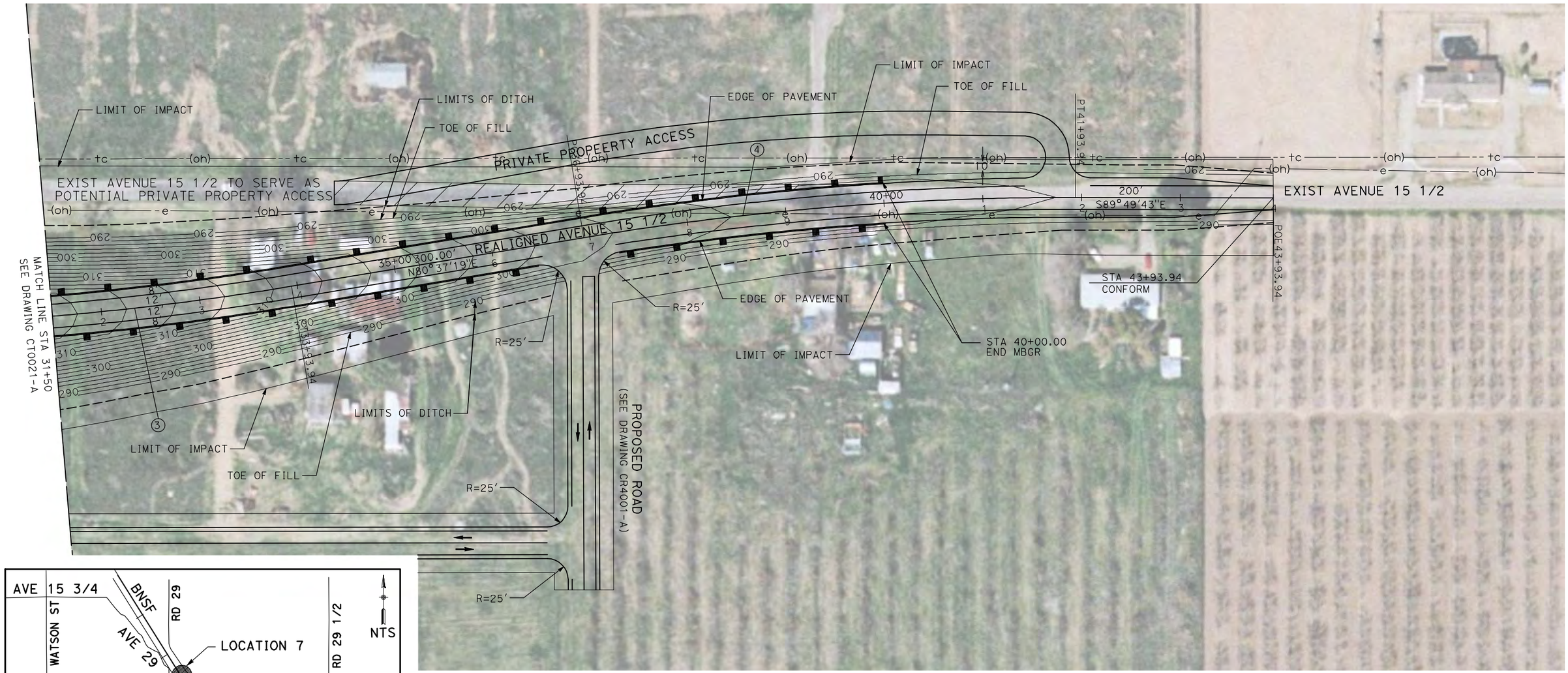
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15 1/2
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0021-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1018-A THROUGH CT1020-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
15% DESIGN SUBMITTAL

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Sacramento, CA 95811

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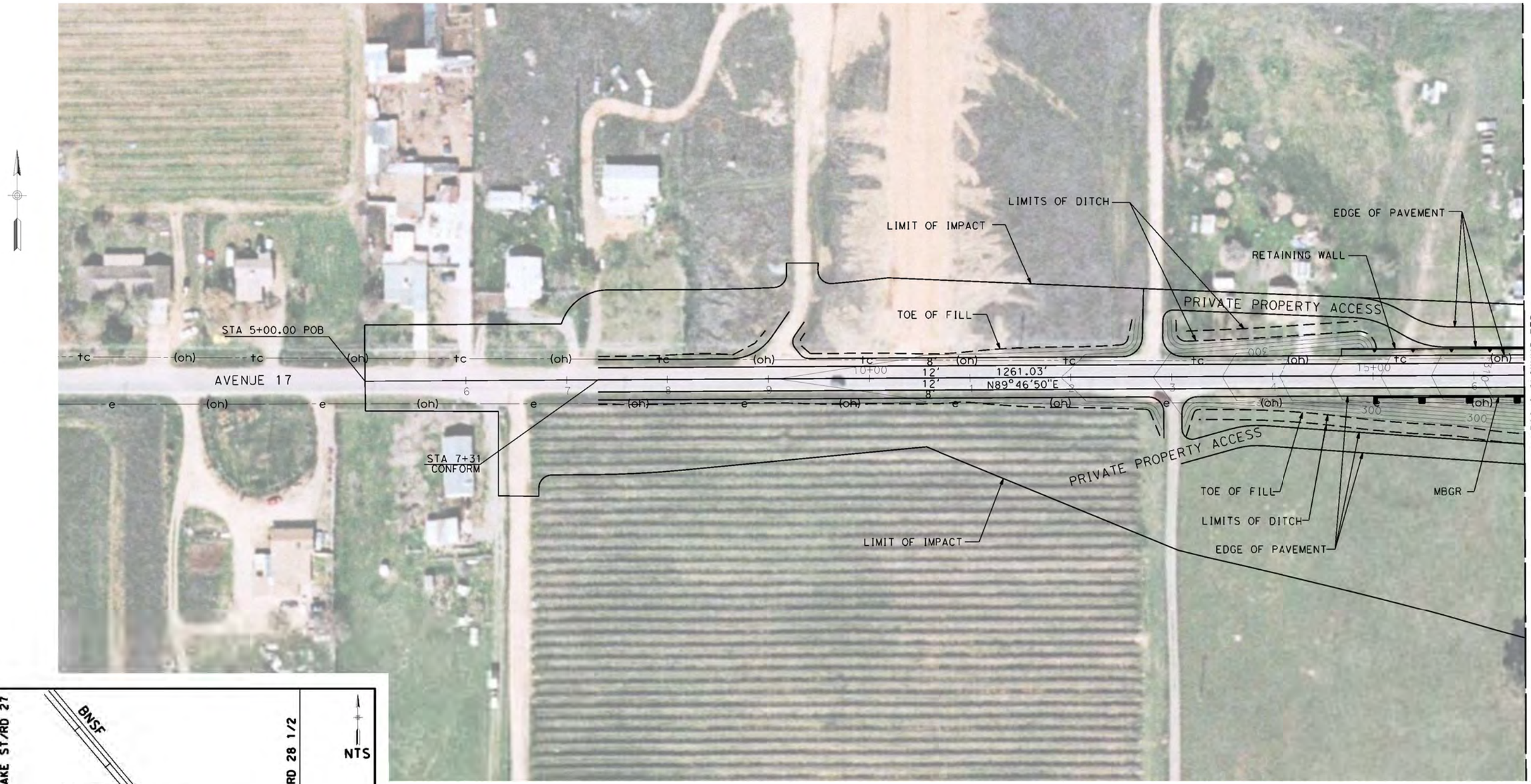
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

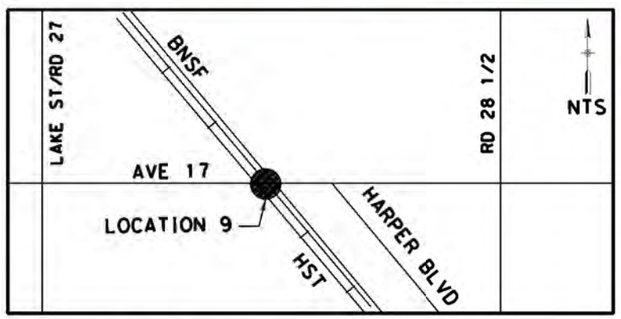
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15 1/2
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0022-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1024-A THROUGH CT1026-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

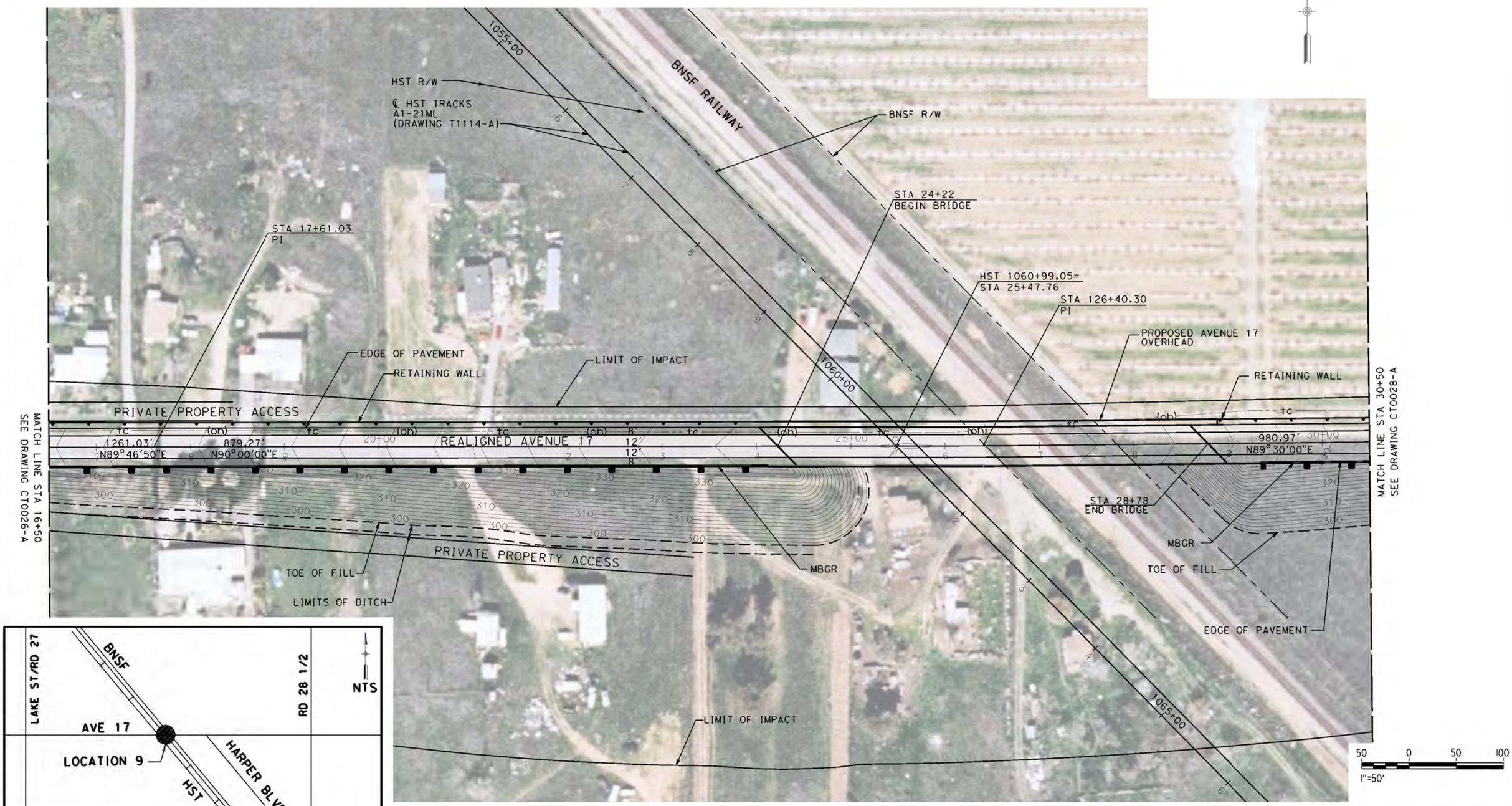
BNFS MAIN LINE - (AVE 21 WYE)
GRADE SEPARATION - AVENUE 17
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0026-A
SCALE AS SHOWN
SHEET NO. OF ###

4/3/2012 6:40:50 PM C:\Projects\356751 - California High Speed Rail - Merced to Fresno\AECOM\BNSF\MF-CT-0026-A.dgn
lros

NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1024-A THROUGH CT1026-A.




| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - (AVE 21 WYE)
GRADE SEPARATION - AVENUE 17
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0027-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/3/2012 6:47:03 PM
lros







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1024-A THROUGH CT1026-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - (AVE 21 WYE)
GRADE SEPARATION - AVENUE 17
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0028-A
SCALE AS SHOWN
SHEET NO. OF ###

4/3/2012 8:51:36 PM C:\Projects\356751 - California High Speed Rail - Merced to Fresno\AECOM\BNSF\MF-CT-0028-A.dgn
lros







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1030-A THROUGH CT1032-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

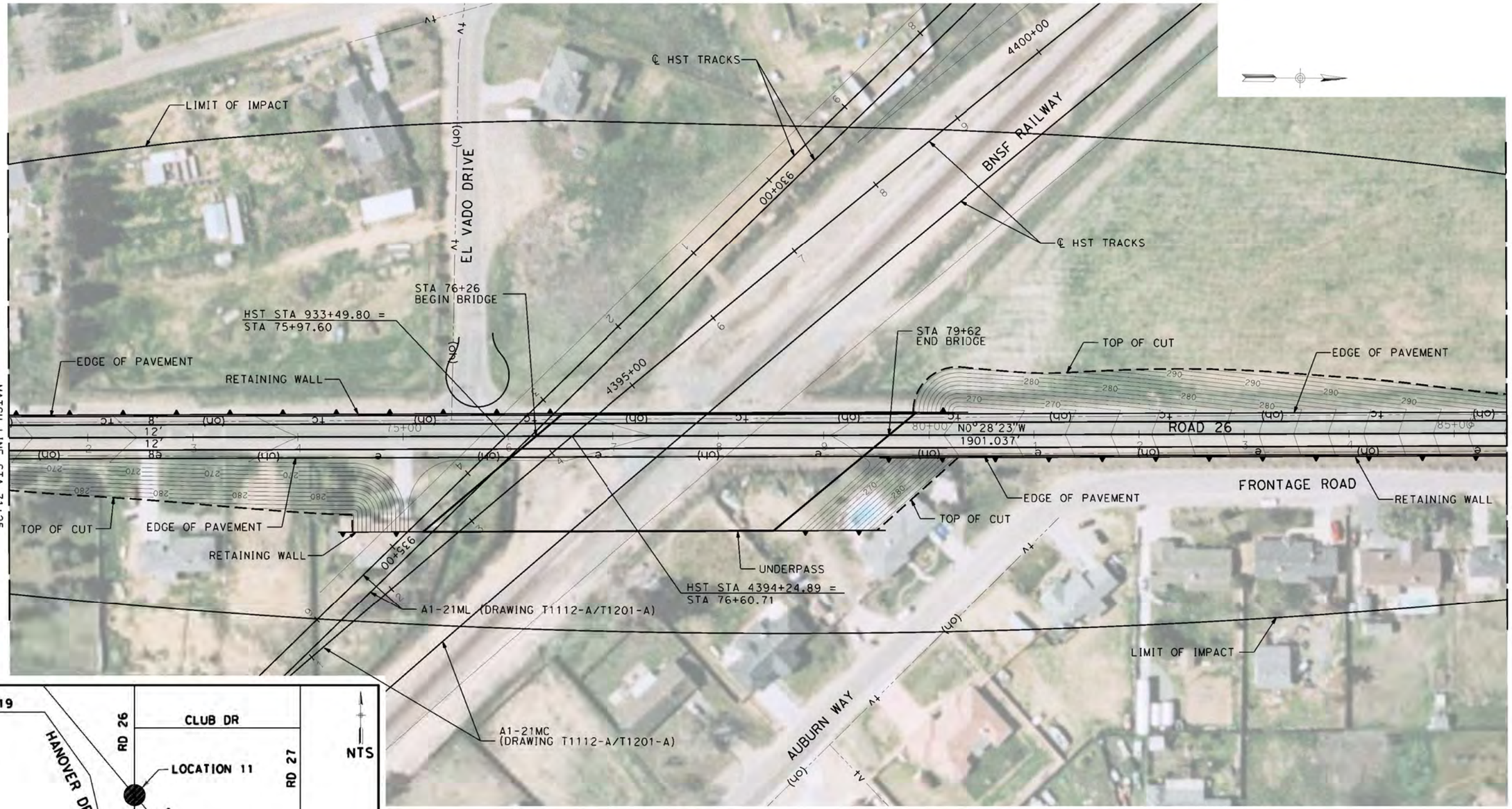
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - (AVE 21 WYE)
UNDERPASS - ROAD 26
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT0032-A
SCALE AS SHOWN
SHEET NO. ### OF ###

C:\Projects\356751 - California High Speed Rail - Merced to Fresno\AECOM\BNSF\MF-CT-0032-A.dgn
4/3/2012 7:18:15 PM
lros







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1030-A THROUGH CT1032-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - (AVE 21 WYE)
UNDERPASS - ROAD 26
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT0033-A
SCALE AS SHOWN
SHEET NO. ### OF ###

4/3/2012 7:19:33 PM C:\Projects\356751 - California High Speed Rail - Merced to Fresno\AECOM\BNSF\MF-CT-0033-A.dgn
lros

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 10000.00' | 01°07'49" | 98.64' | 197.28' | 45 MPH |

LIMIT OF IMPACT

TOP OF CUT

STA 88+99.10 BC

①

STA 90+96.37 EC

EDGE OF PAVEMENT

N0°28'23"W
1901.037'

N01°36'12"W
301.44'

ROAD 26

MATCH LINE STA 85+50
SEE DRAWING CT0033-A

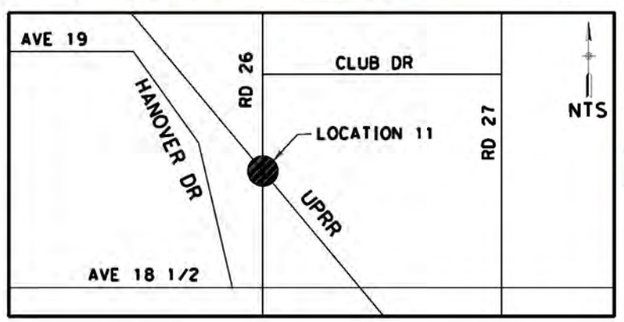
TOE OF CUT

RETAINING WALL

CLUB DRIVE

STA 93+97.81 POE
CONFORM

EDGE OF PAVEMENT




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1030-A THROUGH CT1032-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 07/27/2011

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - (AVE 21 WYE)
UNDERPASS - ROAD 26
LAYOUT
SHEET 3 OF 3

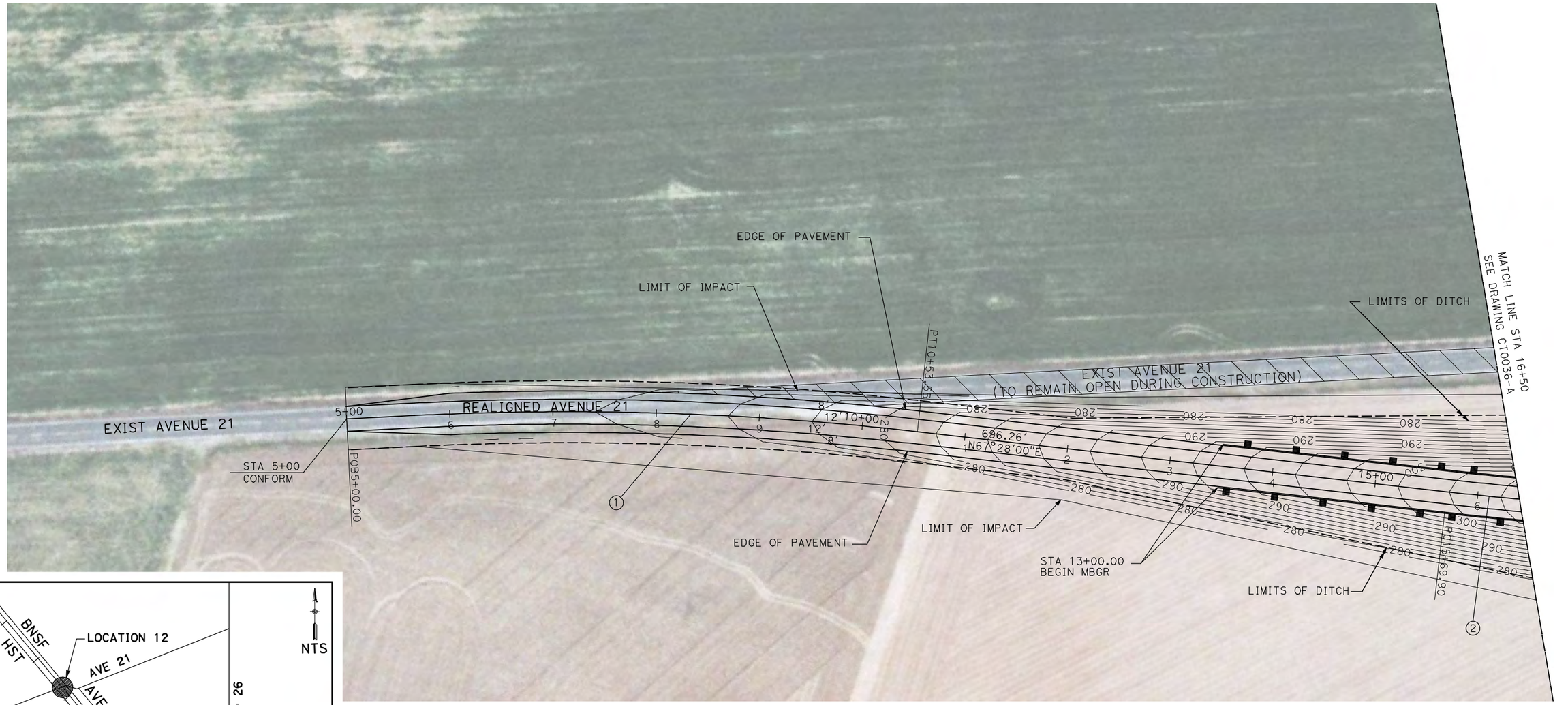
CONTRACT NO. HSR06-007
DRAWING NO. CT0034-A
SCALE AS SHOWN
SHEET NO. ### OF ###

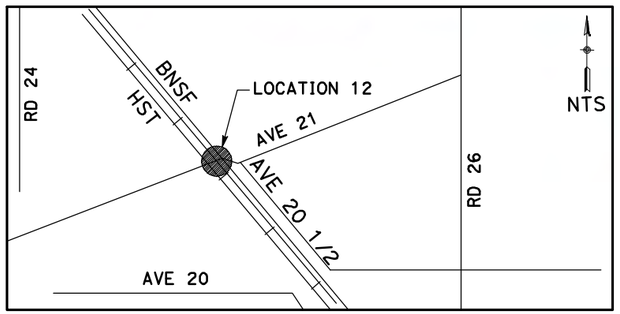
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lros

i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0035-A.dgn
4/29/2011 1:55:27 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 6°43′41" | 176.34′ | 352.27′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




50 0 50 100
1"=50′

NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1033-A THROUGH CT1035-A.

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: H. PHAN
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

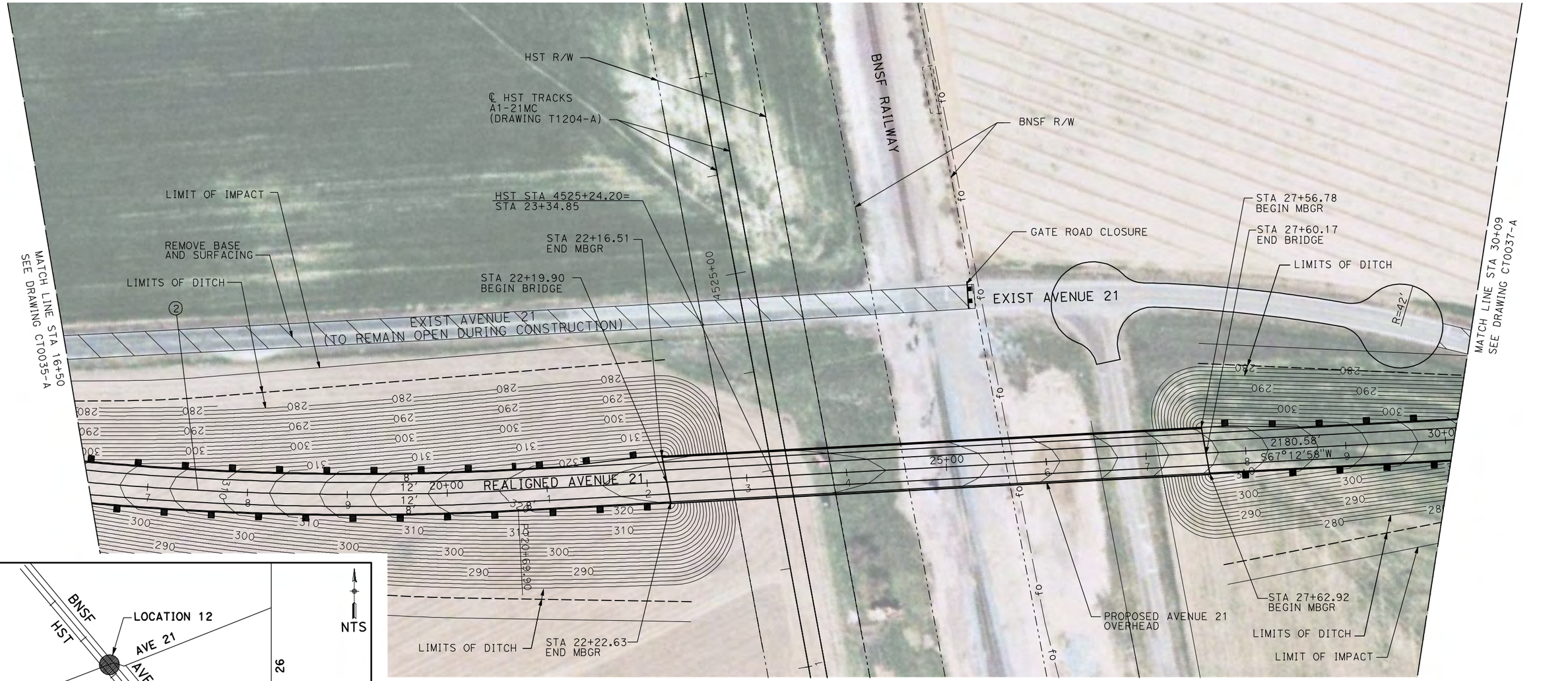
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 21
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0035-A
SCALE AS SHOWN
SHEET NO. ### OF ###

| CURVE DATA | | | | | |
|---|---|---|---|---|---|
| NO. | R | Δ | T | L | V |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1033-A THROUGH CT1035-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

| | |
|---|---|
| DESIGNED BY | R. GIBSON |
| DRAWN BY | H. PHAN |
| CHECKED BY | J. ZANDIAN |
| IN CHARGE | A. BOONE |
| DATE | 04/29/2011 |

**RECORD SET**
**15% DESIGN SUBMITTAL**

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Sacramento, CA 95811
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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 21
LAYOUT
SHEET 2 OF 3

| | |
|---|---|
| CONTRACT NO. | HST06-007 |
| DRAWING NO. | CT0036-A |
| SCALE | AS SHOWN |
| SHEET NO. | ### OF ### |

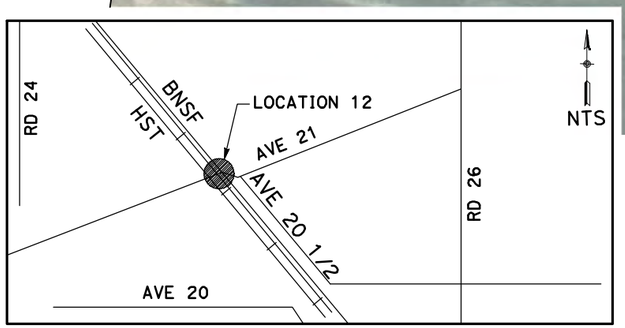
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4/29/2011 1:55:35 PM
GibsonR1

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4/29/2011 1:55:44 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1036-A THROUGH CT1038-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

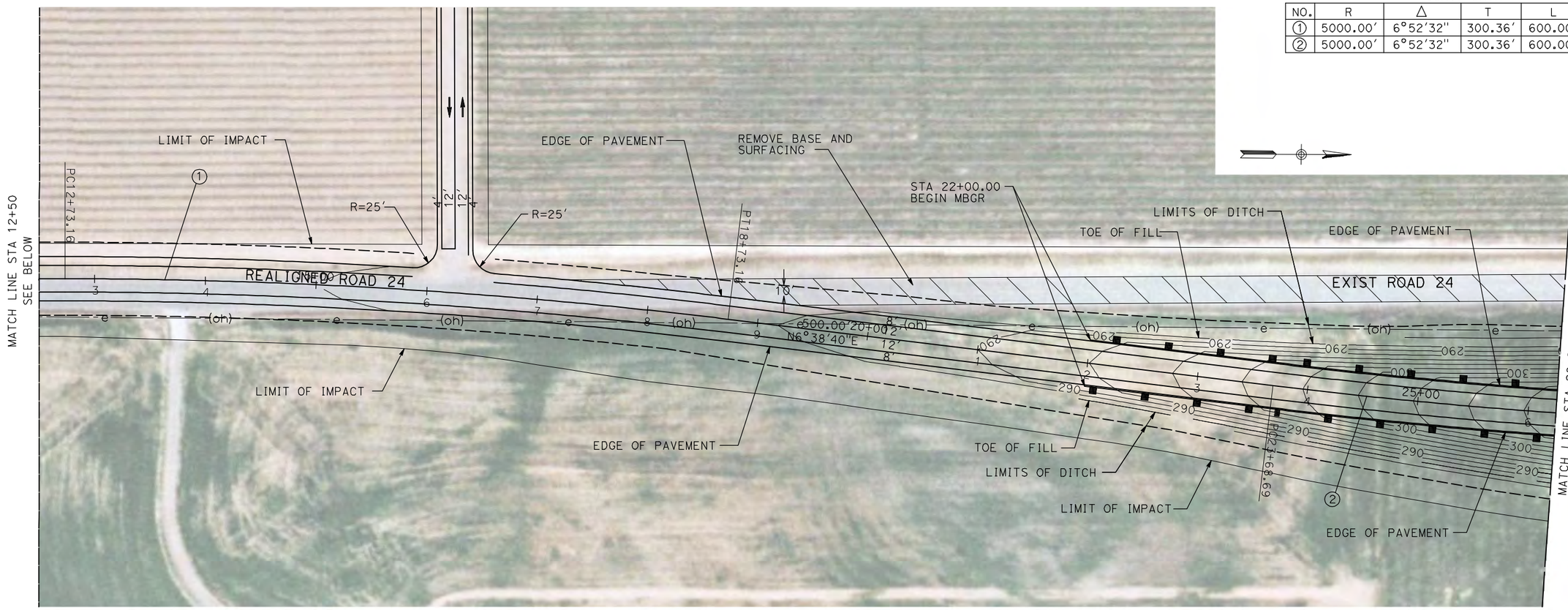
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 21
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0037-A
SCALE AS SHOWN
SHEET NO. ### OF ###

C:\Users\GibsonR1\Documents\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0038-A.dgn 4/29/2011 1:55:51 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0038-A.dgn GibsonR1

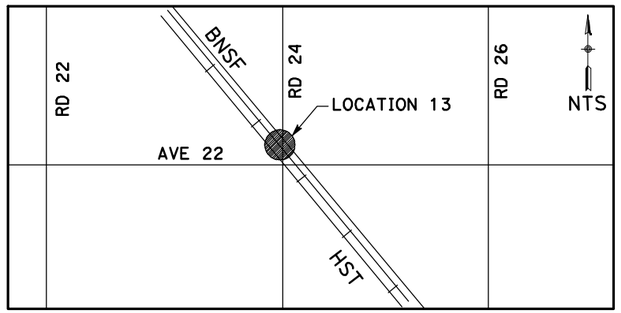
CURVE DATA

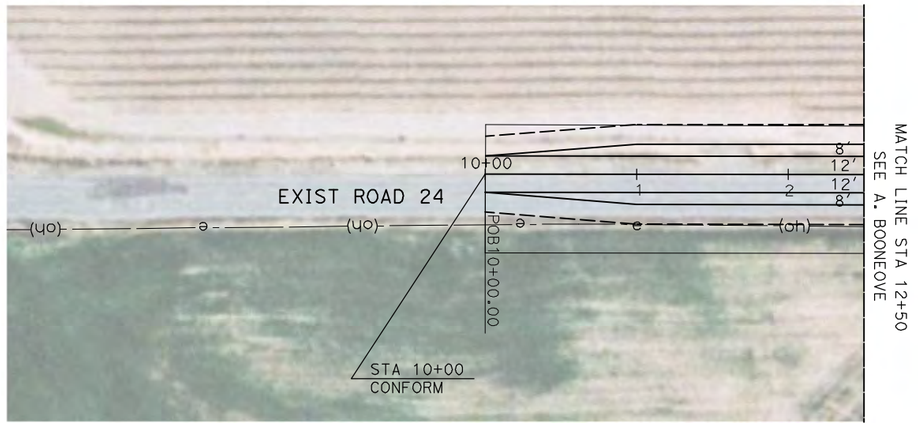
| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00′ | 6°52′32″ | 300.36′ | 600.00′ | 45 MPH |
| ② | 5000.00′ | 6°52′32″ | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1036-A THROUGH CT1038-A.




50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 24
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0038-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| | | | | | |

HST STA 4597+68.95=
STA 33+73.23

STA 33+08.35
END MBGR

STA 32+63.43
BEGIN BRIDGE

STA 32+26.28
END MBGR

LIMIT OF IMPACT

LIMITS OF DITCH

②

℄ HST TRACKS
A1-21MC
(DRAWING T1205-A)

REMOVE BASE AND
SURFACING

HST R/W

EXIST ROAD 24
(TO REMAIN OPEN DURING CONSTRUCTION)

4600+00

4595+00

30+00

REALIGNED ROAD 24

35+00

40+00

398.37′
N0°09′28"W

STA 38+57.91
BEGIN MBGR

STA 38+13.09
END BRIDGE

STA 37+76.89
BEGIN MBGR

PROPOSED ROAD 24
OVERHEAD

BNSF RAILWAY

BNSF R/W

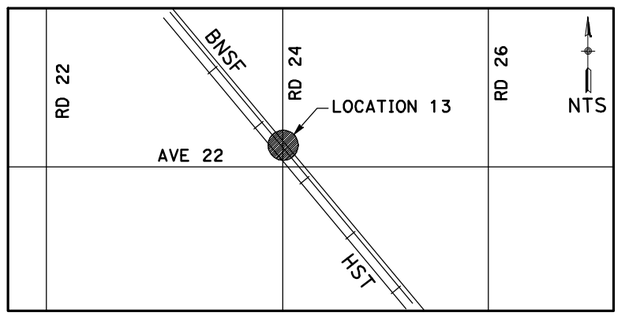
LIMITS OF DITCH

LIMITS OF DITCH

LIMITS OF DITCH

MATCH LINE STA 26+25
SEE DRAWING CT0038-A

MATCH LINE STA 40+50
SEE DRAWING CT0040-A




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1036-A THROUGH CT1038-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 24
LAYOUT
SHEET 2 OF 3

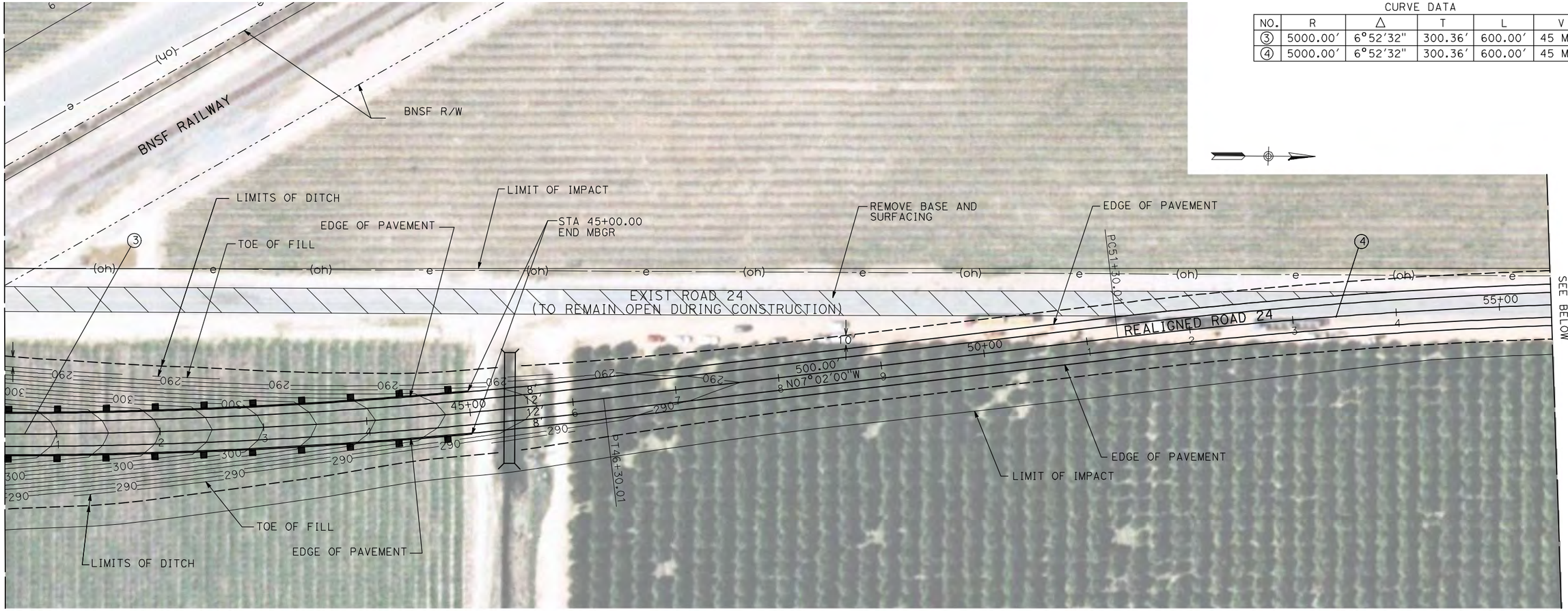
CONTRACT NO. HST06-007
DRAWING NO. CT0039-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

C:\Users\GibsonRI\Desktop\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0040-A.dgn 4/29/2011 1:56:07 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway

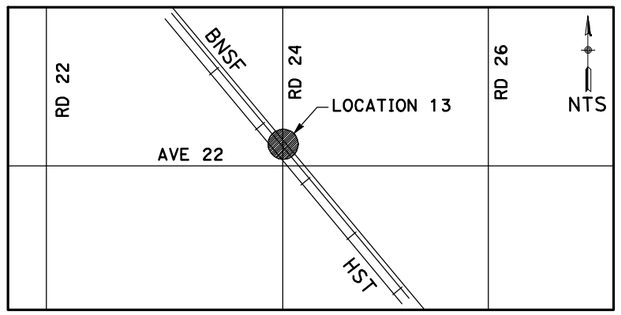
CURVE DATA

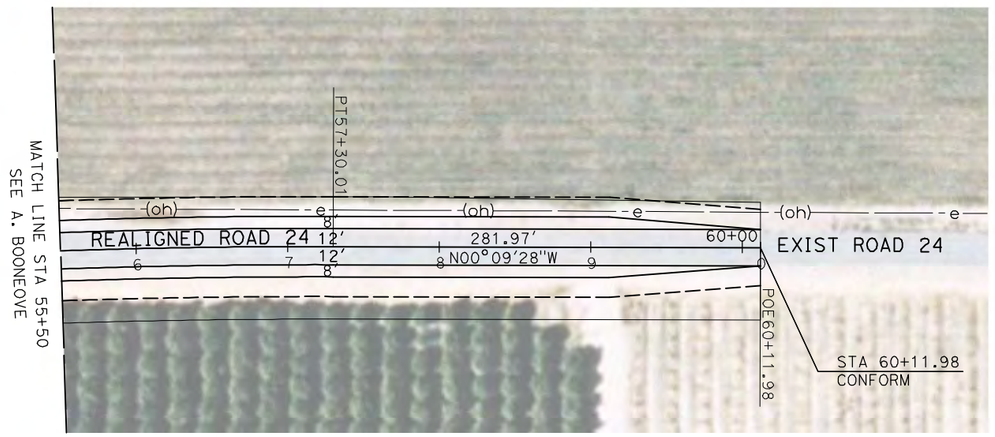
| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ④ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1036-A THROUGH CT1038-A.




50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

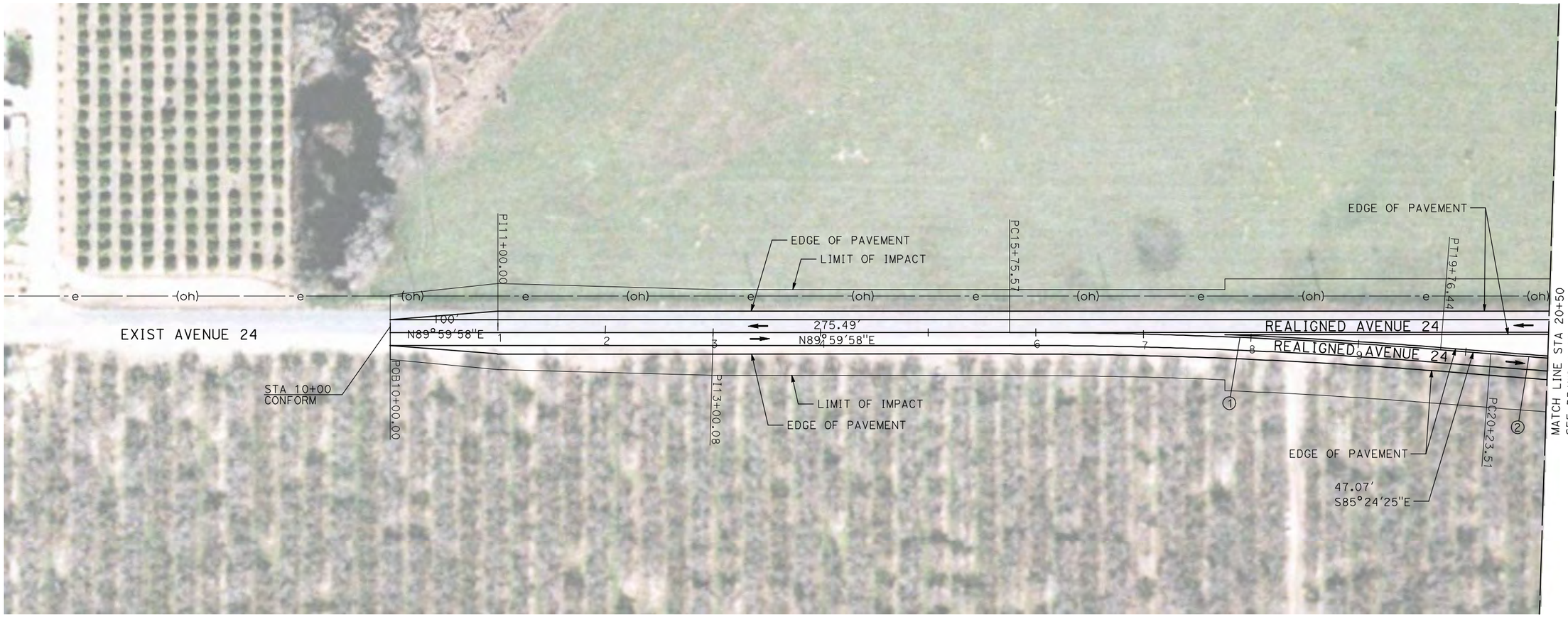
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 24
LAYOUT
SHEET 3 OF 3

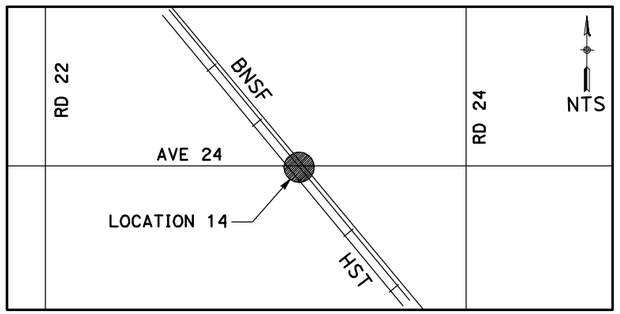
CONTRACT NO. HST06-007
DRAWING NO. CT0040-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 1:56:14 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00′ | 4°35′37" | 200.54′ | 400.87′ | 45 MPH |
| ② | 5000.00′ | 4°35′37" | 200.54′ | 400.87′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1039-A THROUGH CT1041-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

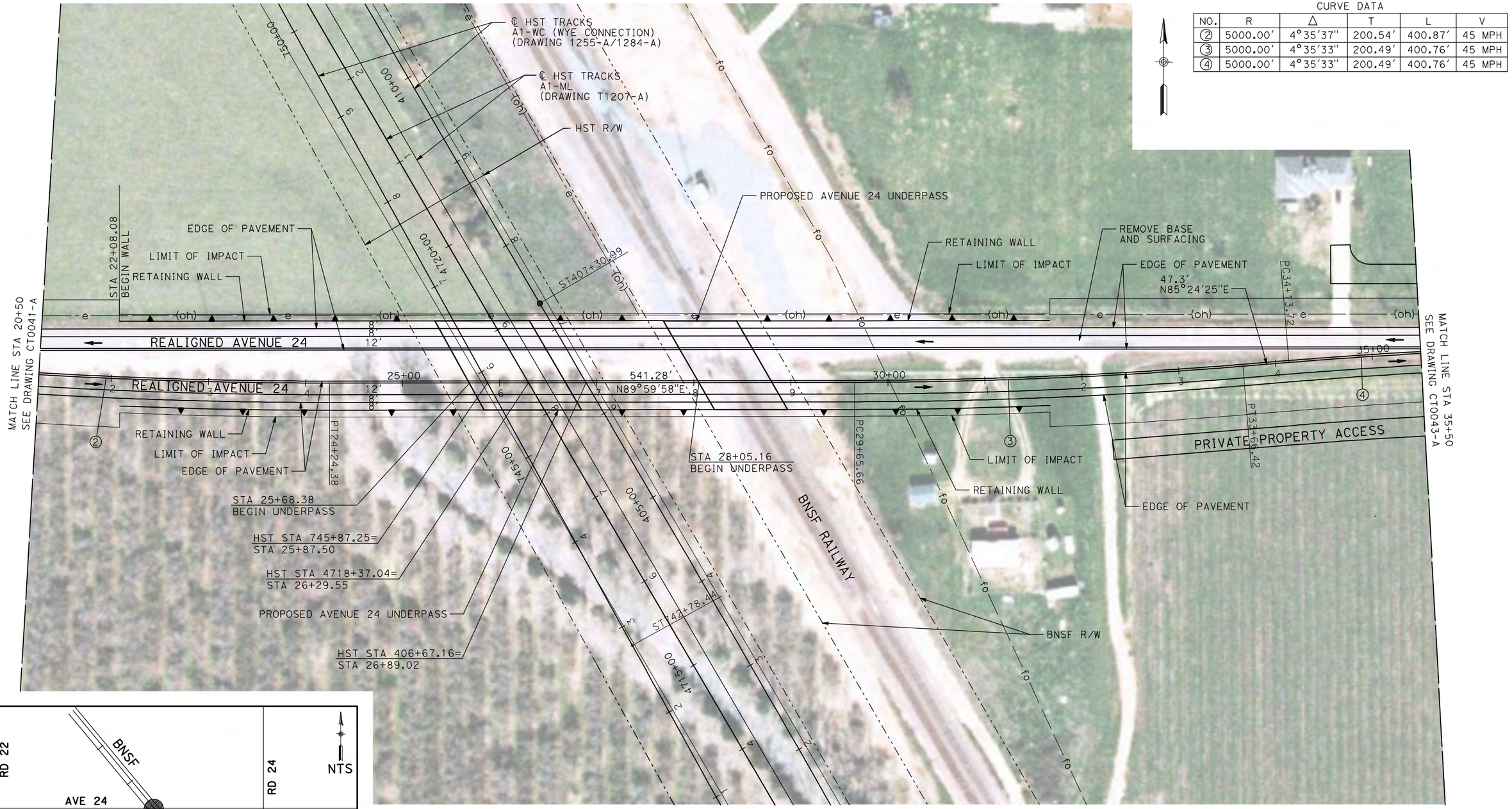
BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - AVENUE 24
LAYOUT
SHEET 1 OF 3

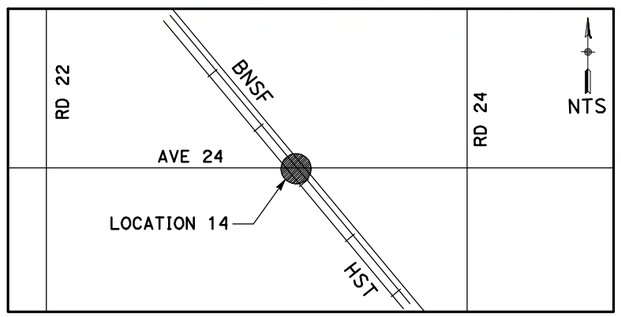
CONTRACT NO. HSR06-007
DRAWING NO. CT0041-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00' | 4°35'37" | 200.54' | 400.87' | 45 MPH |
| ③ | 5000.00' | 4°35'33" | 200.49' | 400.76' | 45 MPH |
| ④ | 5000.00' | 4°35'33" | 200.49' | 400.76' | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1039-A THROUGH CT1041-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

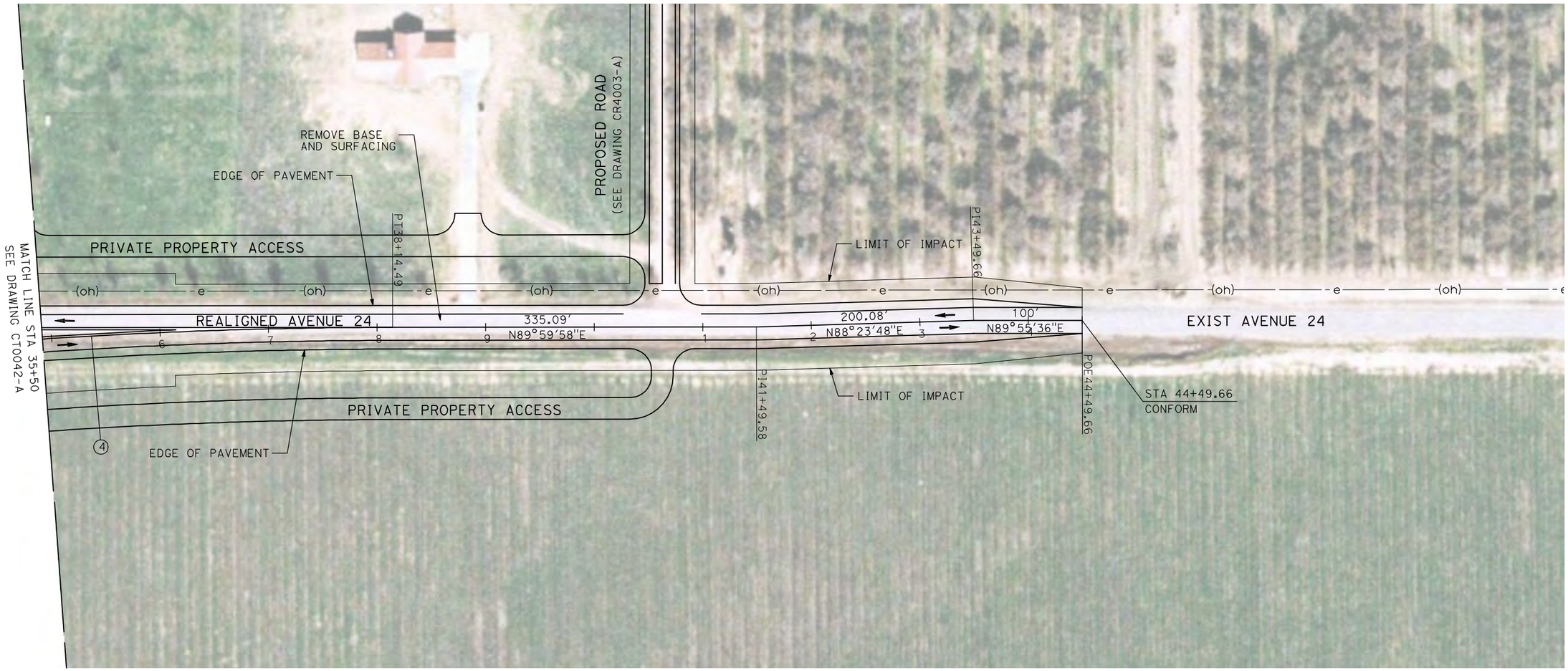
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

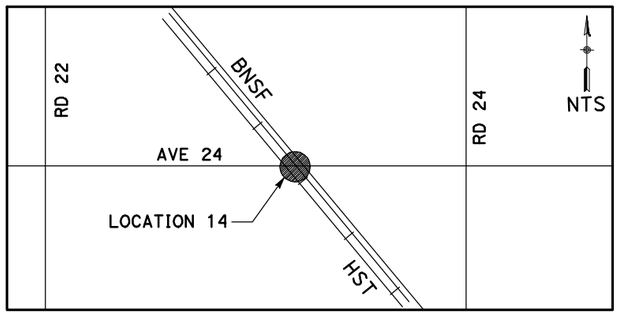
BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - AVENUE 24
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0042-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 5000.00′ | 4°35′33" | 200.49′ | 400.76′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1039-A THROUGH CT1041-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

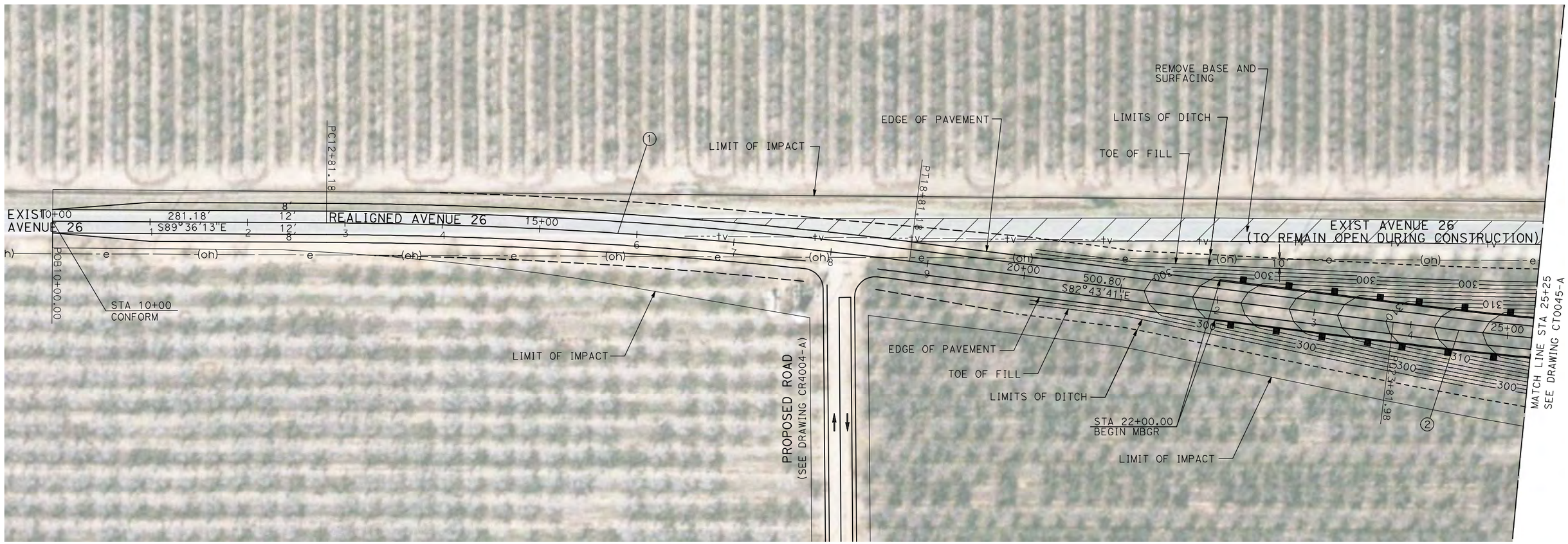
BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - AVENUE 24
LAYOUT
SHEET 3 OF 3

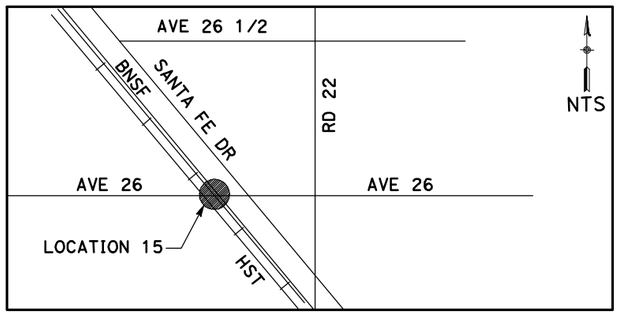
CONTRACT NO. HSR06-007
DRAWING NO. CT0043-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 1:56:27 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1042-A THROUGH CT1044-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

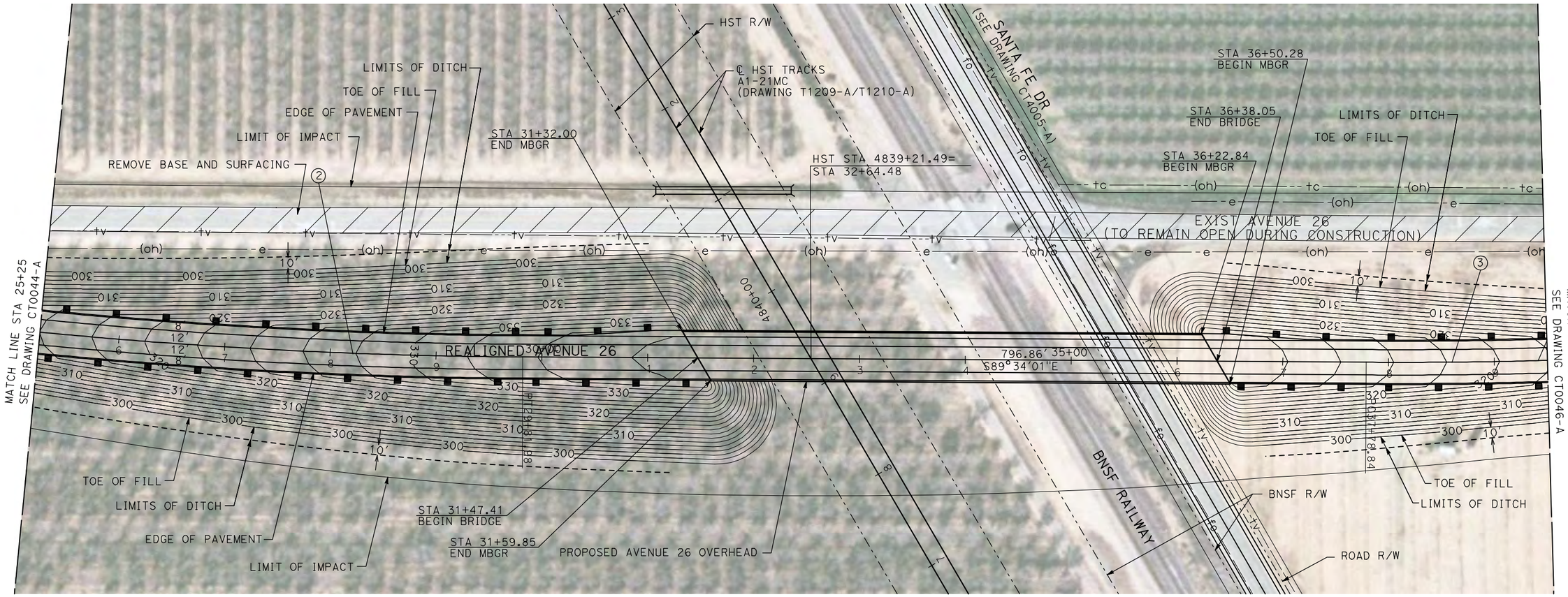
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 26
LAYOUT
SHEET 1 OF 4

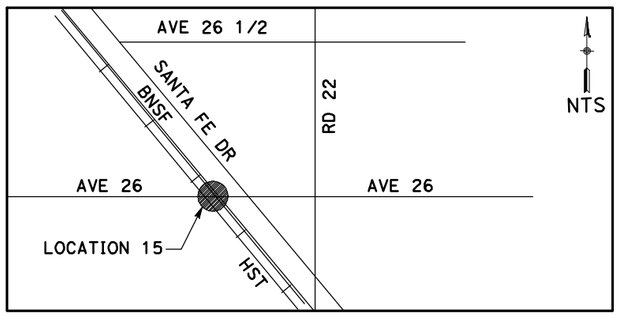
CONTRACT NO. HST06-007
DRAWING NO. CT0044-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 1:56:33 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |
| ③ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1042-A THROUGH CT1044-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

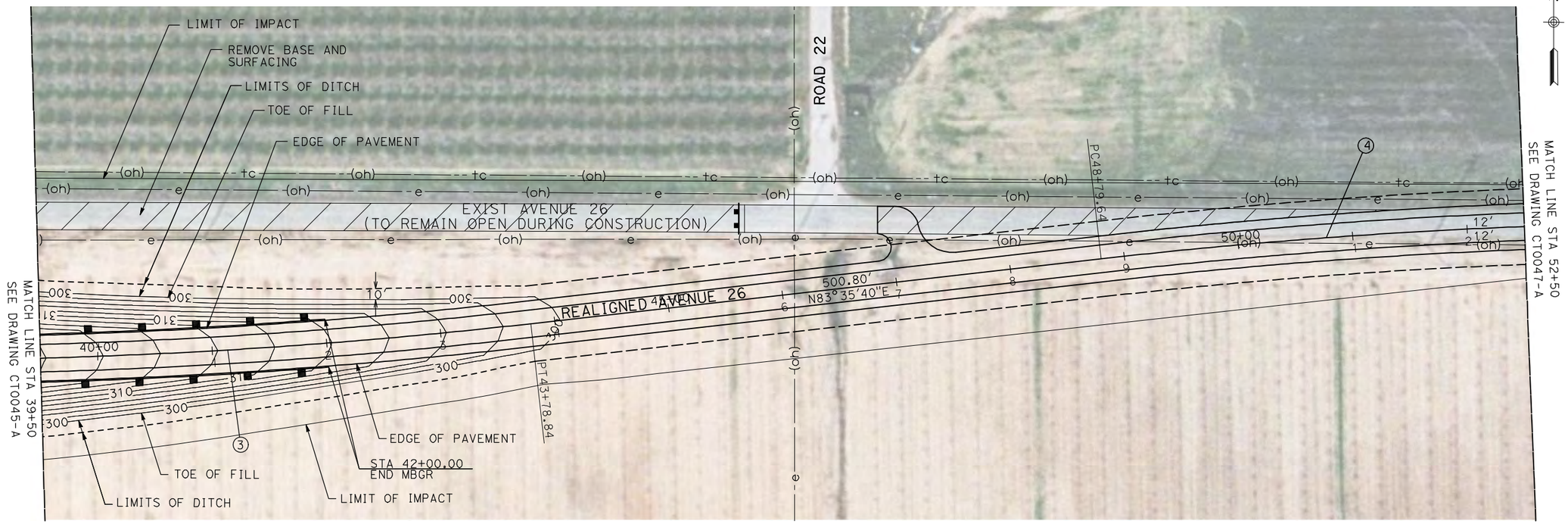
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 26
LAYOUT
SHEET 2 OF 4

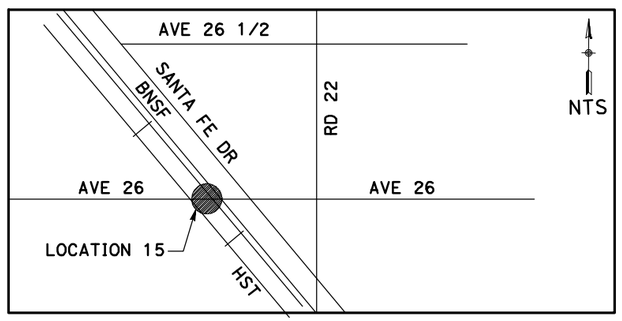
CONTRACT NO. HSR06-007
DRAWING NO. CT0045-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |
| ④ | 5000.00' | 6°52'32" | 300.36' | 600.00' | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1042-A THROUGH CT1044-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

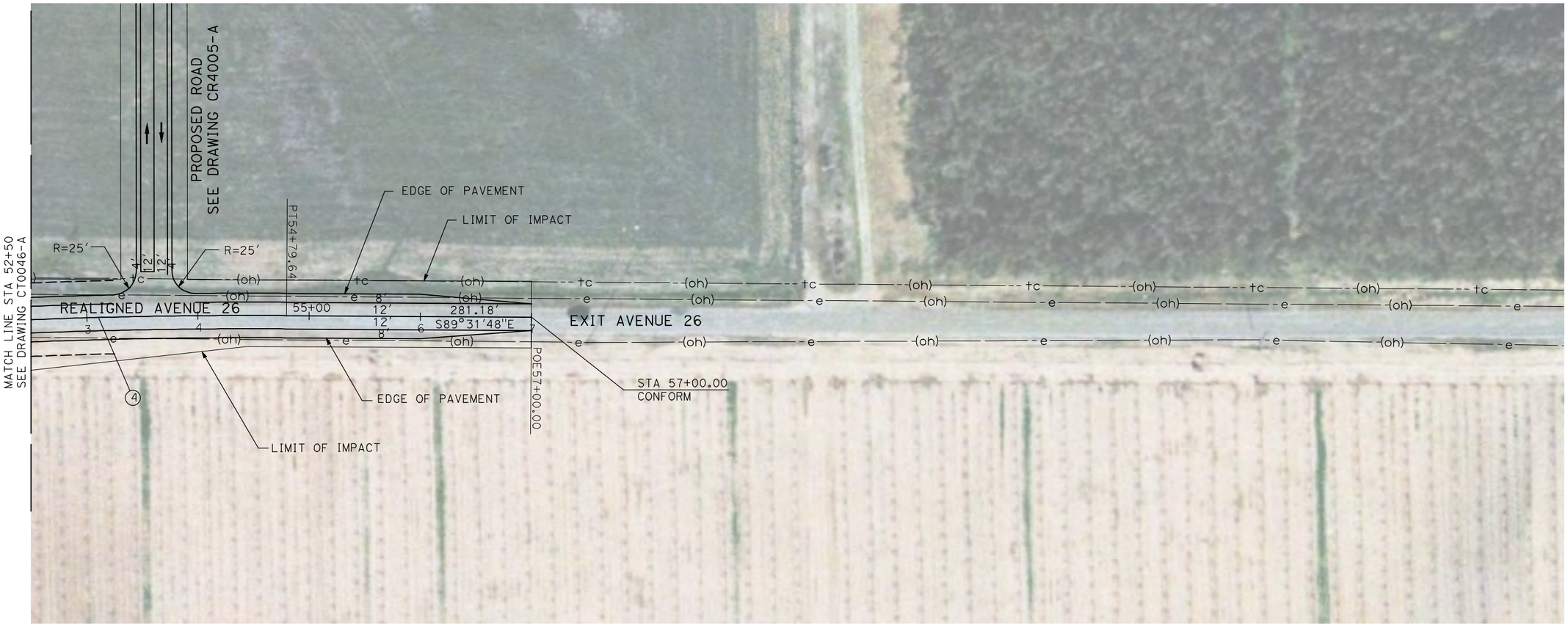
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 26
LAYOUT
SHEET 3 OF 4

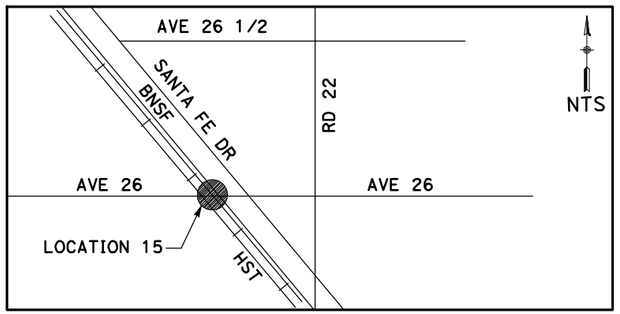
CONTRACT NO. HST06-007
DRAWING NO. CT0046-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1042-A THROUGH CT1044-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 26
LAYOUT
SHEET 4 OF 4

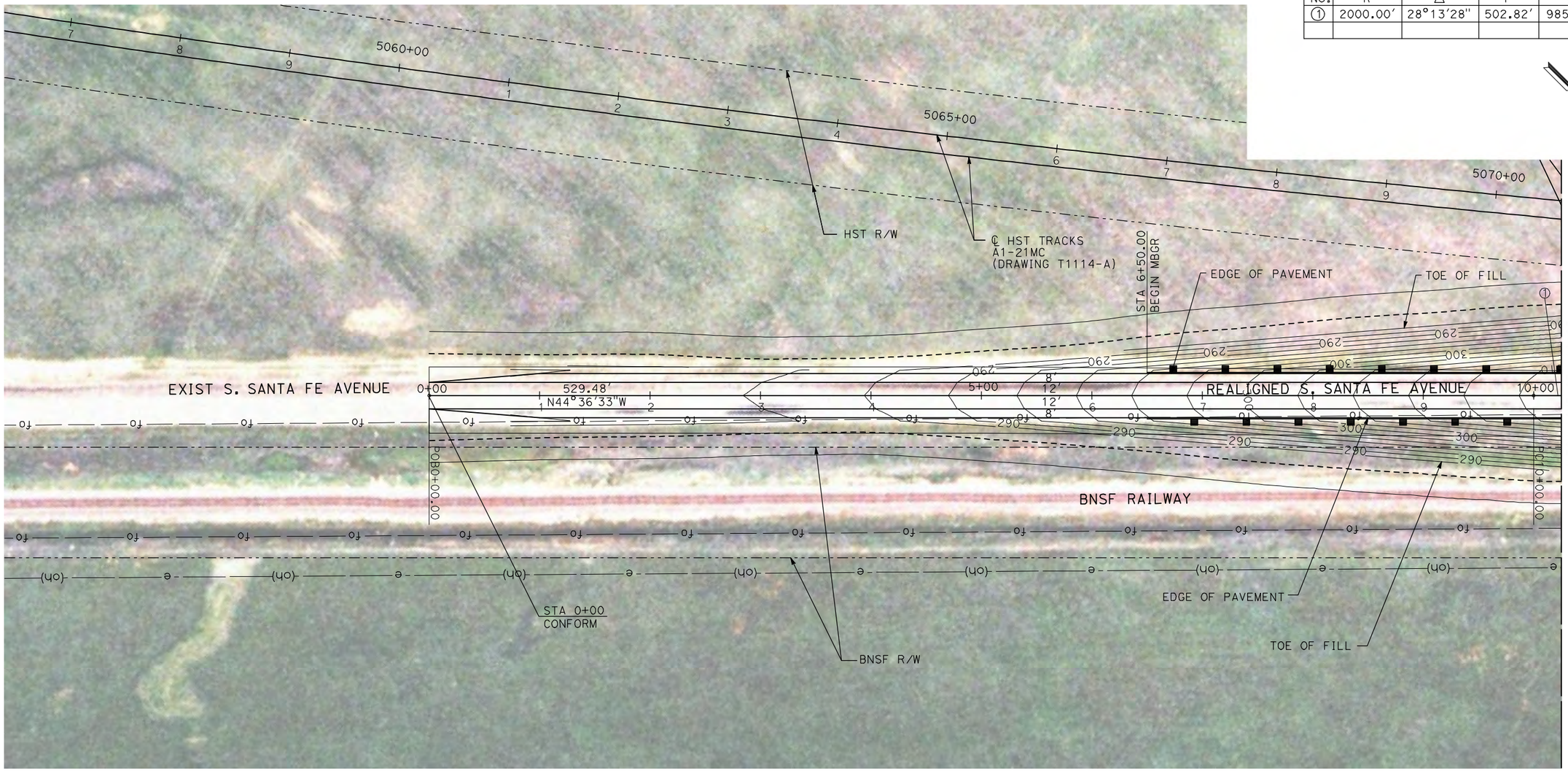
CONTRACT NO. HSR06-007
DRAWING NO. CT0047-A
SCALE AS SHOWN
SHEET NO. ### OF ###

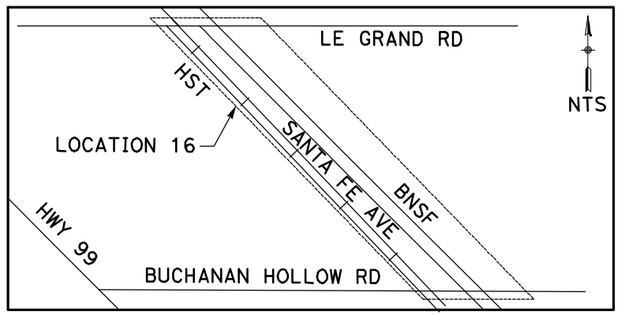
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GibsonR1

i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0048-A.dgn
4/29/2011 1:57:04 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 2000.00′ | 28°13′28″ | 502.82′ | 985.22′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1045-A THROUGH CT1047-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

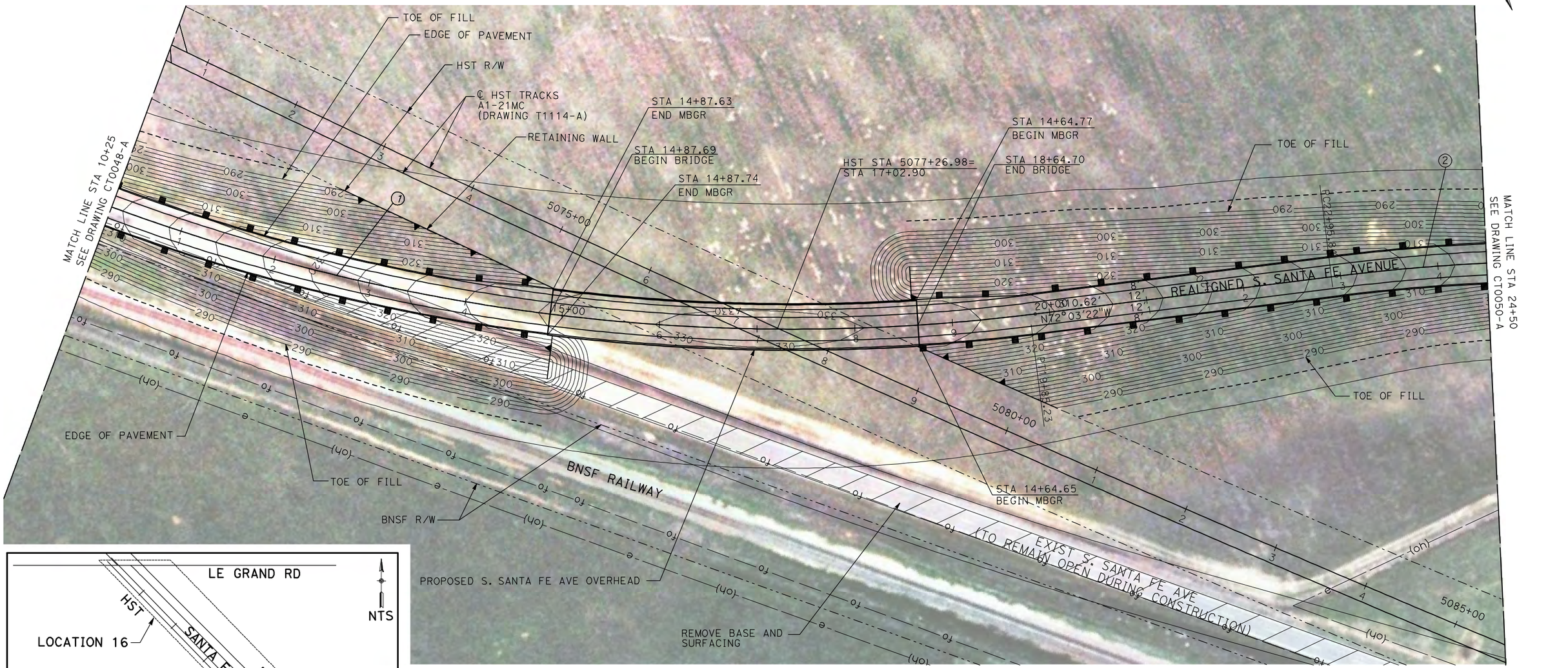
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE AVE
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0048-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 2000.00′ | 28°13′28″ | 502.82′ | 985.22′ | 45 MPH |
| ② | 2000.00′ | 28°13′28″ | 502.82′ | 985.22′ | 45 MPH |







50 0 50 100
1"=50′

NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1045-A THROUGH CT1047-A.

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE AVE
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0049-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 2000.00′ | 51°25′13" | 962.97′ | 1794.91′ | 45 MPH |
| | | | | | |

REALIGNED S. SANTA FE AVE

EDGE OF PAVEMENT

LIMITS OF DITCH

TOE OF FILL

LIMIT OF IMPACT

ISTH 29+00.00
END MBGR

MATCH LINE STA 24+50
SEE DRAWING CT0049-A

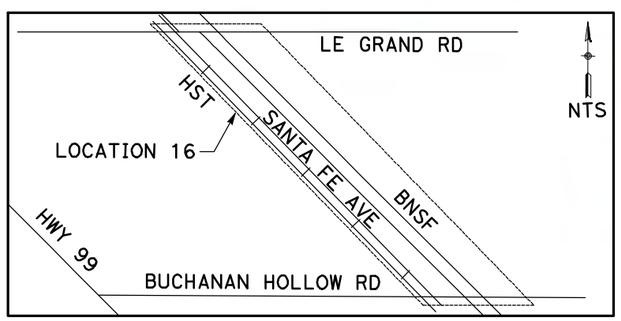
MATCH LINE STA 39+25
SEE DRAWING CR4007-A

REMOVE BASE AND SURFACING

℄ HST TRACKS

HST R/W

EXIST S. SANTA FE AVE
(TO REMAIN OPEN DURING CONSTRUCTION)




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1045-A THROUGH CT1047-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE AVE
LAYOUT
SHEET 3 OF 3

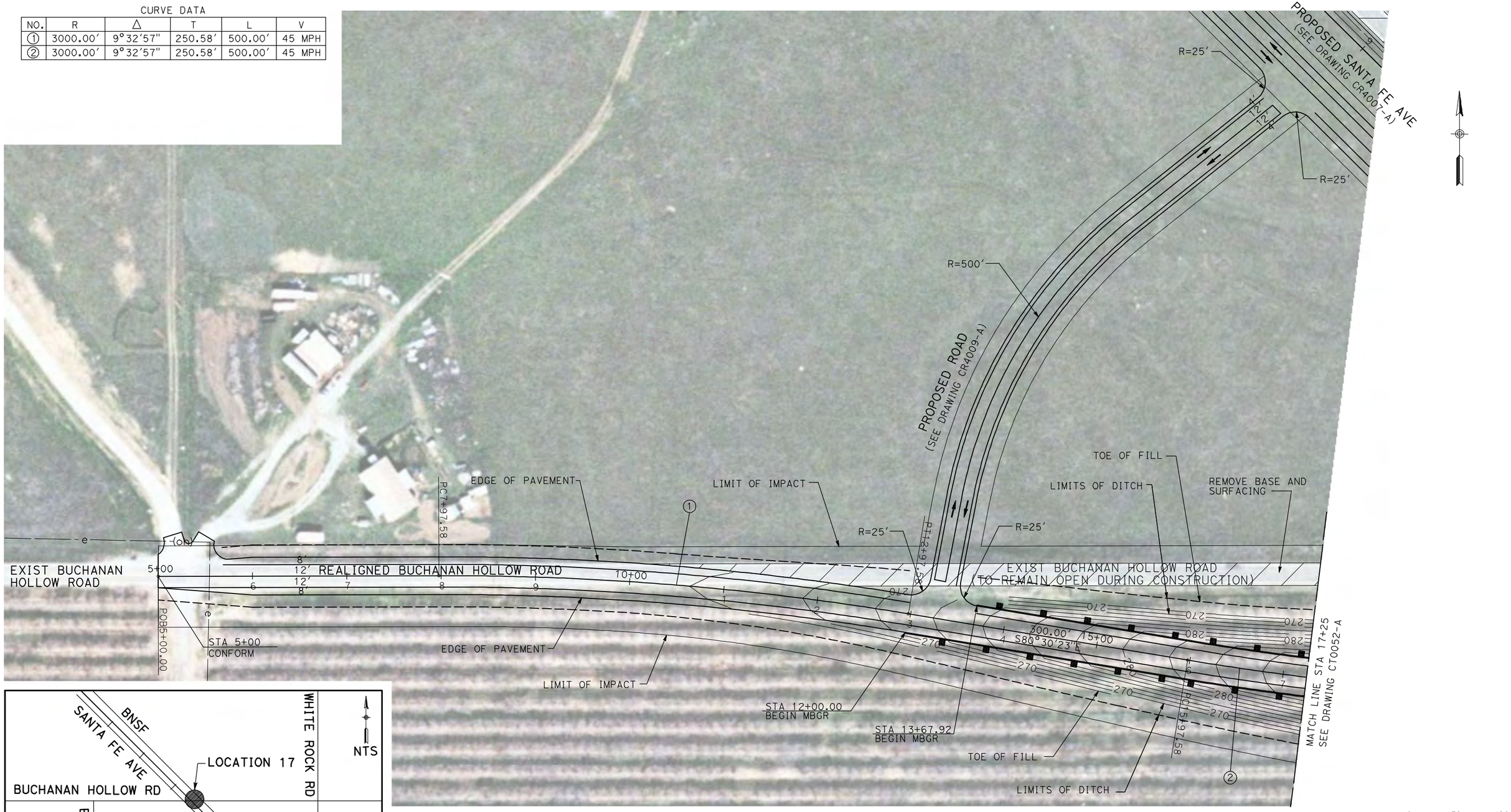
CONTRACT NO. HST06-007
DRAWING NO. CT0050-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | △ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1048-A THROUGH CT1050-A.

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BUCHANAN HOLLOW ROAD
LAYOUT
SHEET 1 OF 3

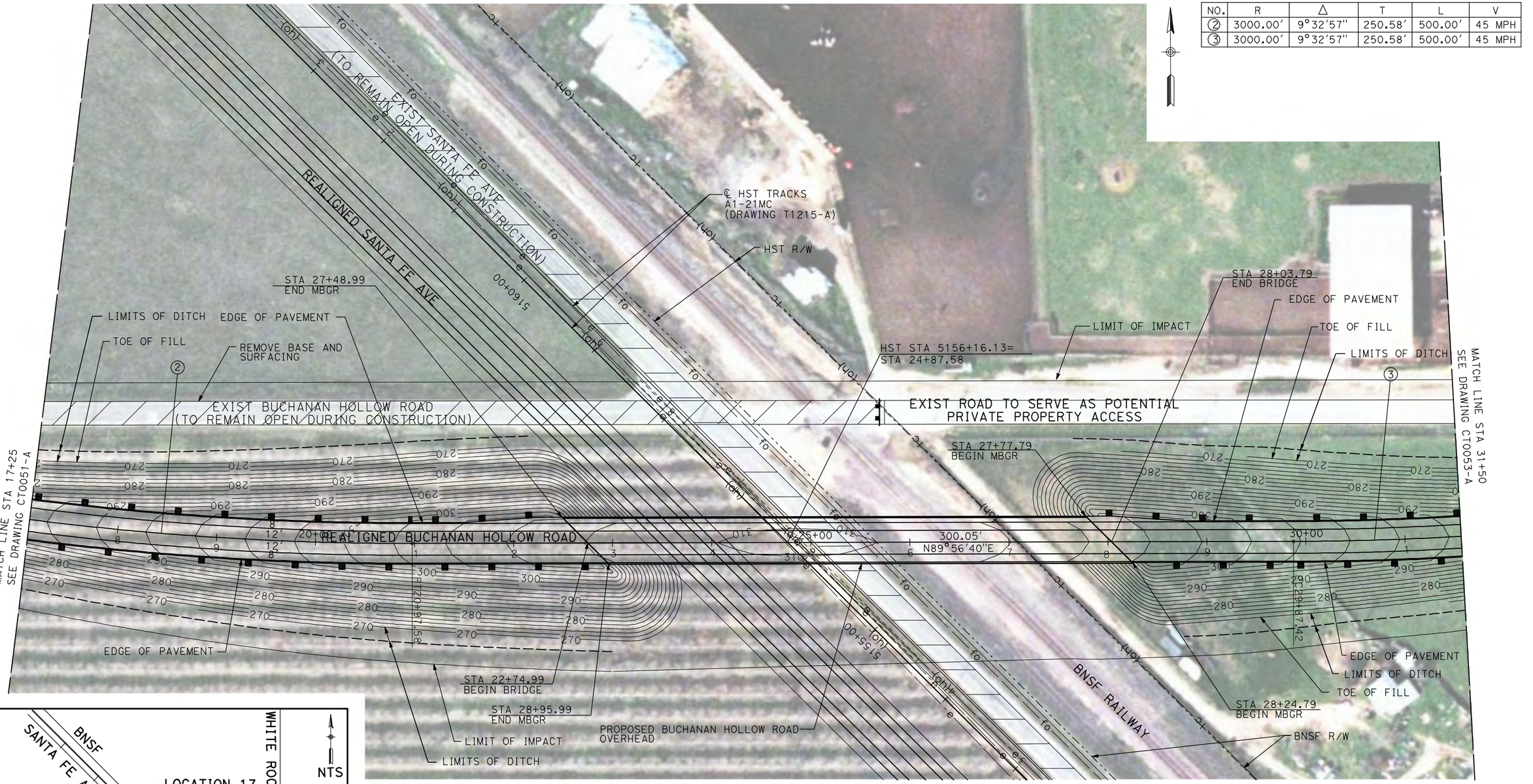
CONTRACT NO. HST06-007
DRAWING NO. CT0051-A
SCALE AS SHOWN
SHEET NO. ### OF ###

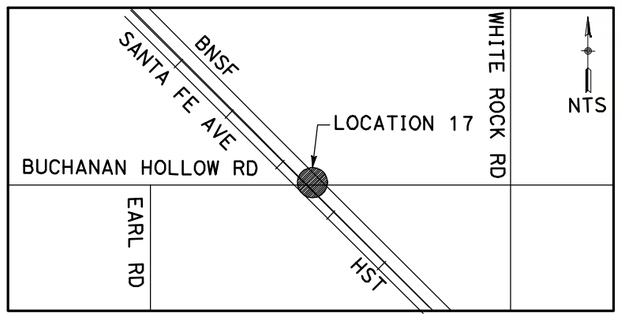
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GibsonR1

I:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\MF-CT-0052-A.dgn
4/29/2011 1:57:35 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1048-A THROUGH CT1050-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

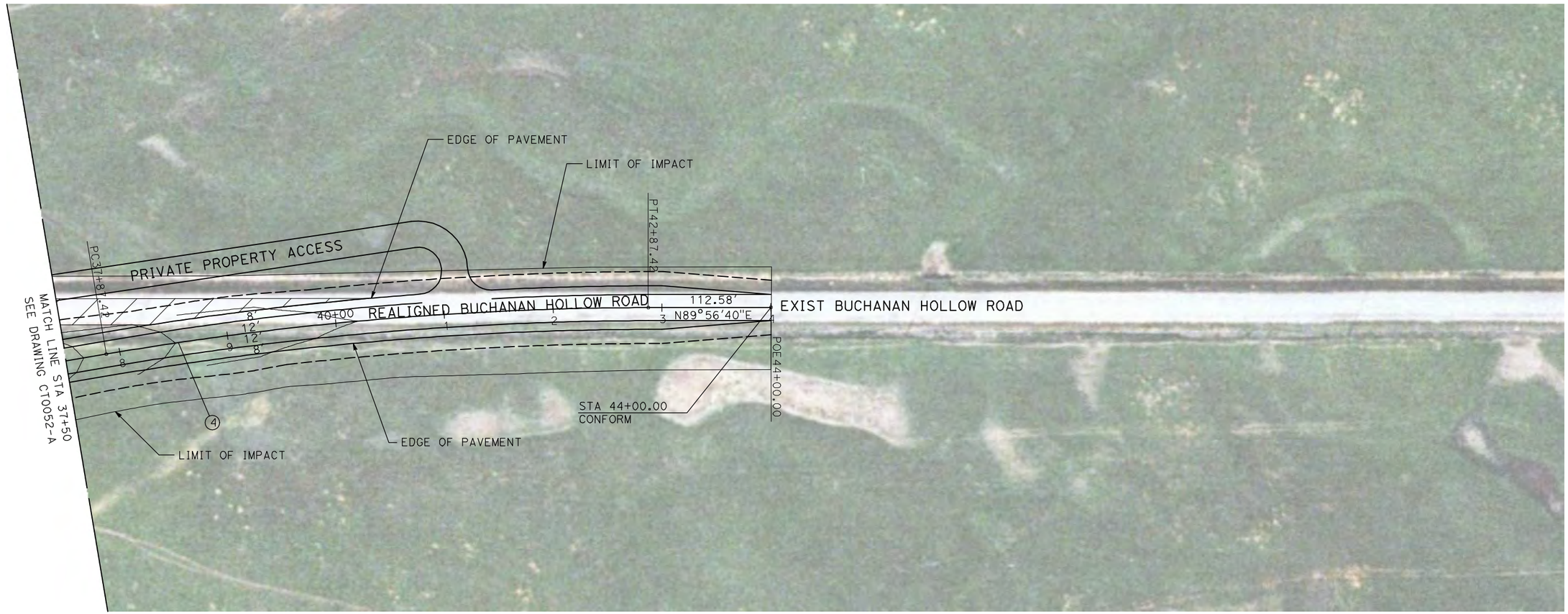
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

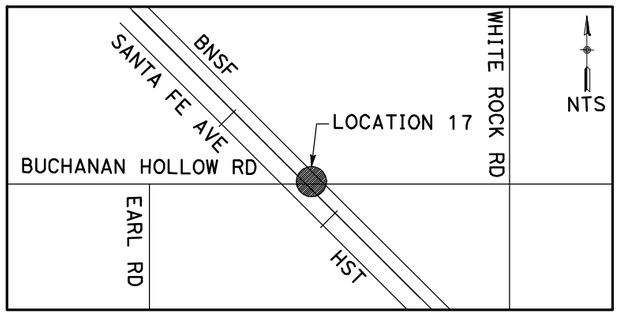
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BUCHANAN HOLLOW ROAD
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0052-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1048-A THROUGH CT1050-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

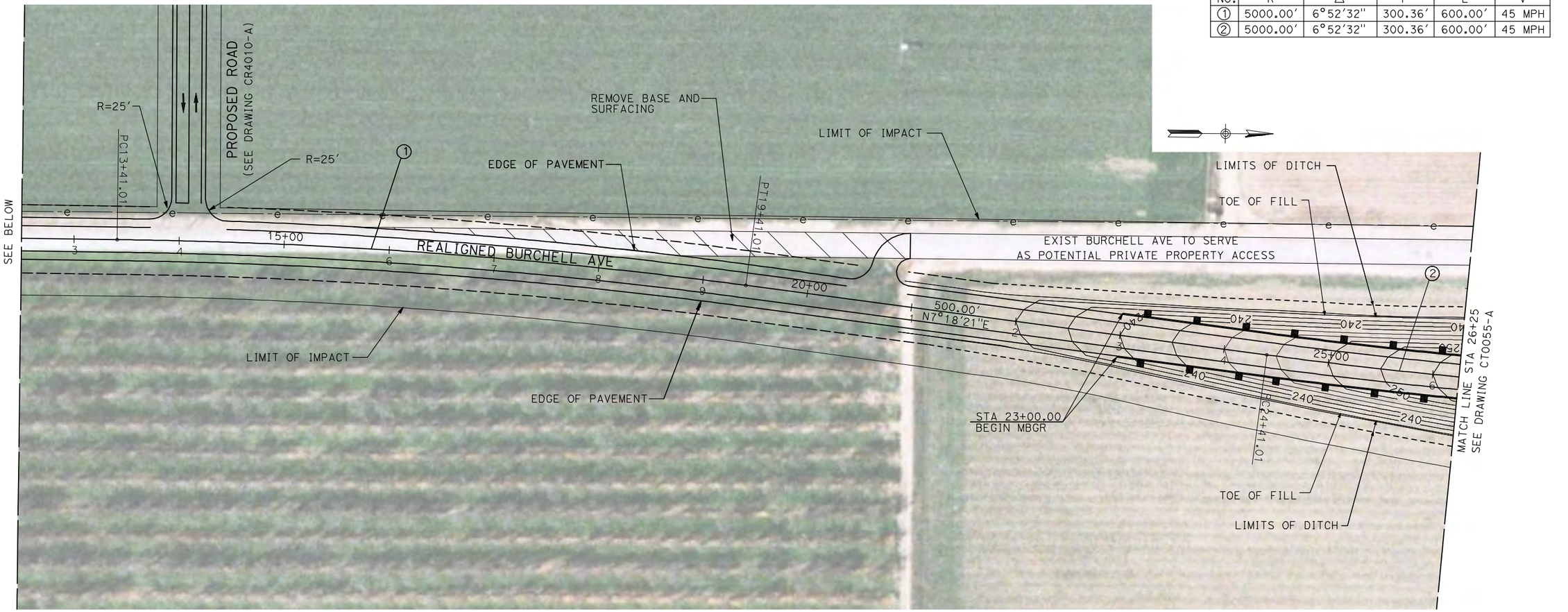
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BUCHANAN HOLLOW ROAD
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0053-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

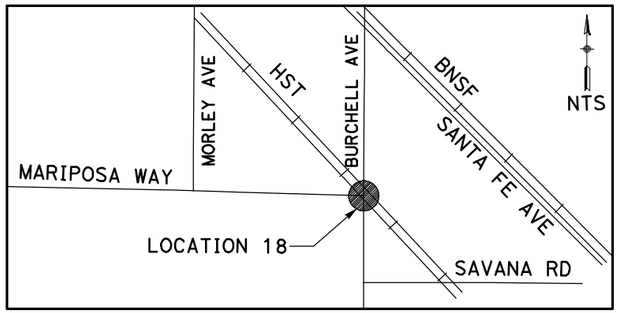
CURVE DATA

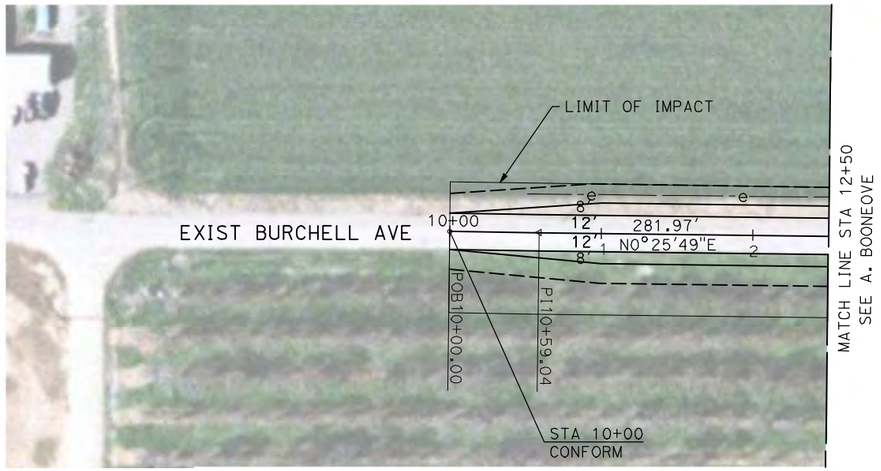
| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1051-A THROUGH CT1053-A.




50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

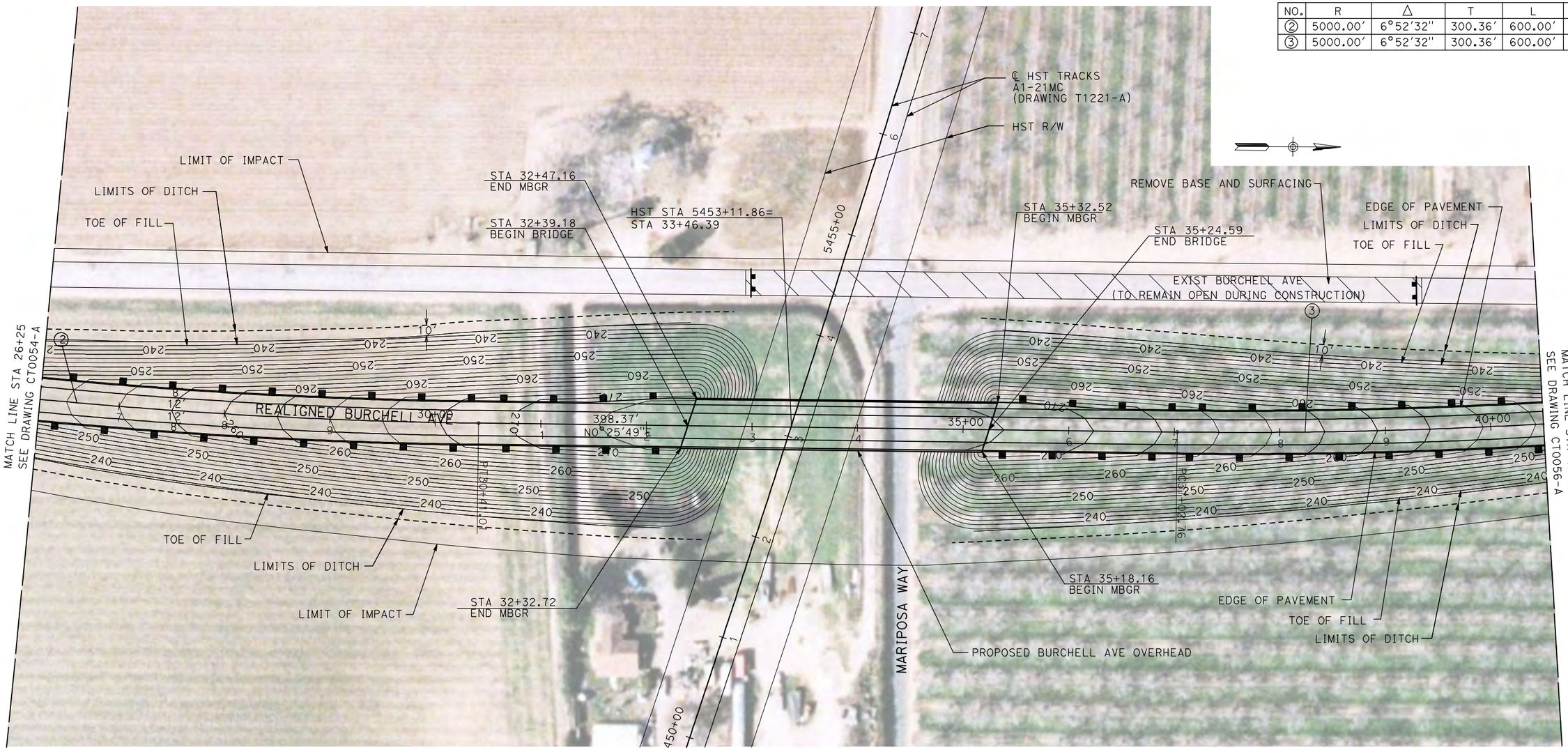
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL AVE
LAYOUT
SHEET 1 OF 3

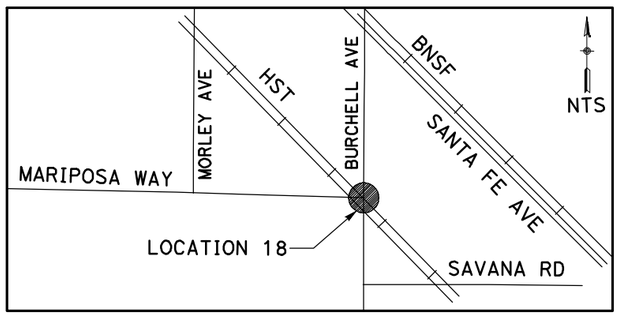
CONTRACT NO. HST06-007
DRAWING NO. CT0054-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ③ | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1051-A THROUGH CT1053-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL AVE
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0055-A
SCALE AS SHOWN
SHEET NO. ### OF ###

4/29/2011 1:57:59 PM i:\cher\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0055-A.dgn
GibsonR1

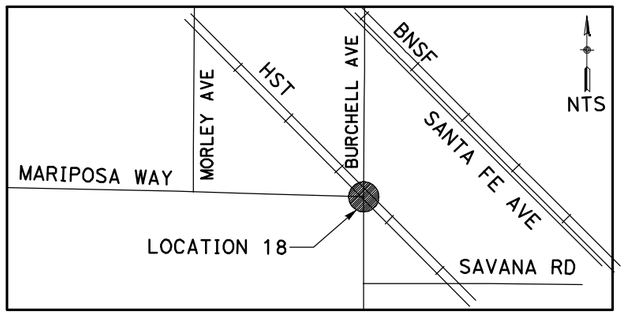
CURVE DATA

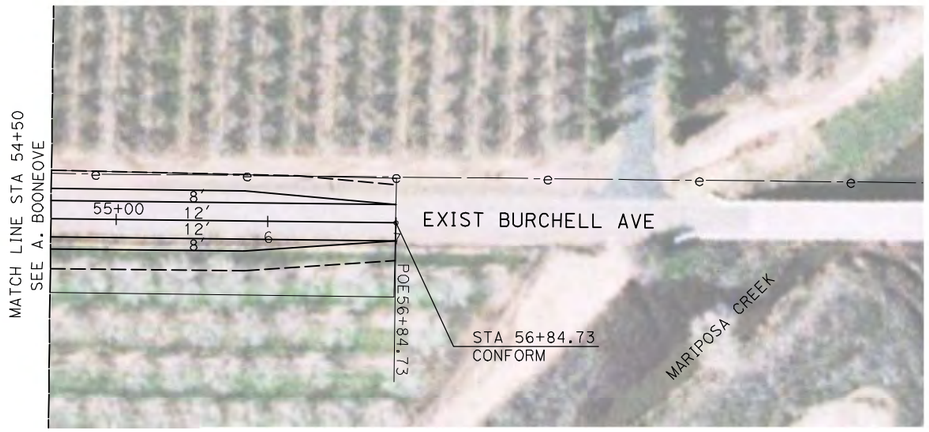
| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 5000.00′ | 6°52′32″ | 300.36′ | 600.00′ | 45 MPH |
| ④ | 5000.00′ | 6°52′32″ | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1051-A THROUGH CT1053-A.




50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**


AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL


CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

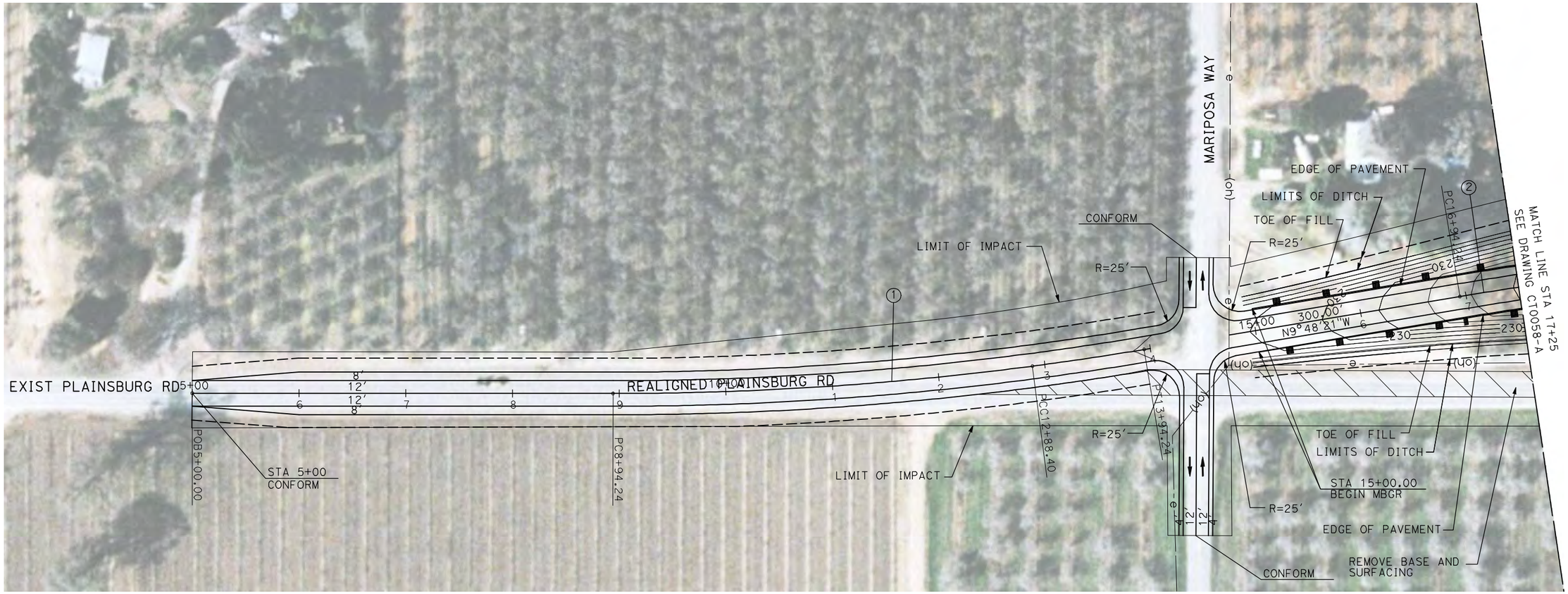
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL AVE
LAYOUT
SHEET 3 OF 3

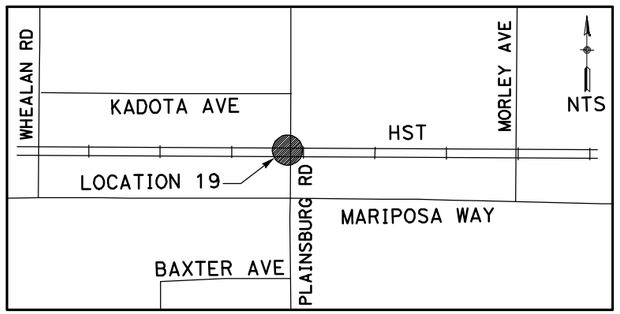
CONTRACT NO. HST06-007
DRAWING NO. CT0056-A
SCALE AS SHOWN
SHEET NO. ### OF ###


i:\cnsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\MF-CT-0056-A.dgn
4/29/2011 1:58:09 PM GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1054-A THROUGH CT1056-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0057-A
SCALE AS SHOWN
SHEET NO. ### OF ###

4/29/2011 1:58:15 PM i:\chsr\6002962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0057-A.dgn
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |

HST R/W

℄ HST TRACKS
A1-21MC
(DRAWING T1223-A)

HST STA 5562+72.46=
STA 24+19.65

5565+00

5560+00

LIMITS OF DITCH

TOE OF FILL

STA 23+17.50
END MBGR

STA 23+17.50
BEGIN BRIDGE

STA 25+77.62
BEGIN MBGR

STA 25+77.62
END BRIDGE

LIMITS OF DITCH

TOE OF FILL

LIMIT OF IMPACT

② ③

PI 22+84.24

PI 27+28.00

20+00

25+00

30+00

300.05′
N0°15′24"W

REALIGNED PLAINSBURG RD

MATCH LINE STA 17+25
SEE DRAWING CT0057-A

MATCH LINE STA 31+50
SEE DRAWING CT0059-A

EXIST PLAINSBURG ROAD
(TO REMAIN OPEN DURING CONSTRUCTION)

EXIST PLAINSBURG ROAD TO SERVE AS POTENTIAL
PRIVATE PROPERTY ACCESS

TOE OF FILL

LIMITS OF DITCH

LIMIT OF IMPACT

STA 23+17.50
END MBGR

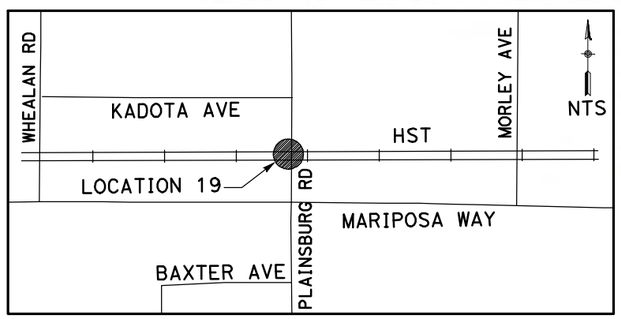
REMOVE BASE AND
SURFACING

PROPOSED PLAINSBURG RD
OVERHEAD

STA 25+77.62
BEGIN MBGR

TOE OF FILL

LIMITS OF DITCH




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1054-A THROUGH CT1056-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

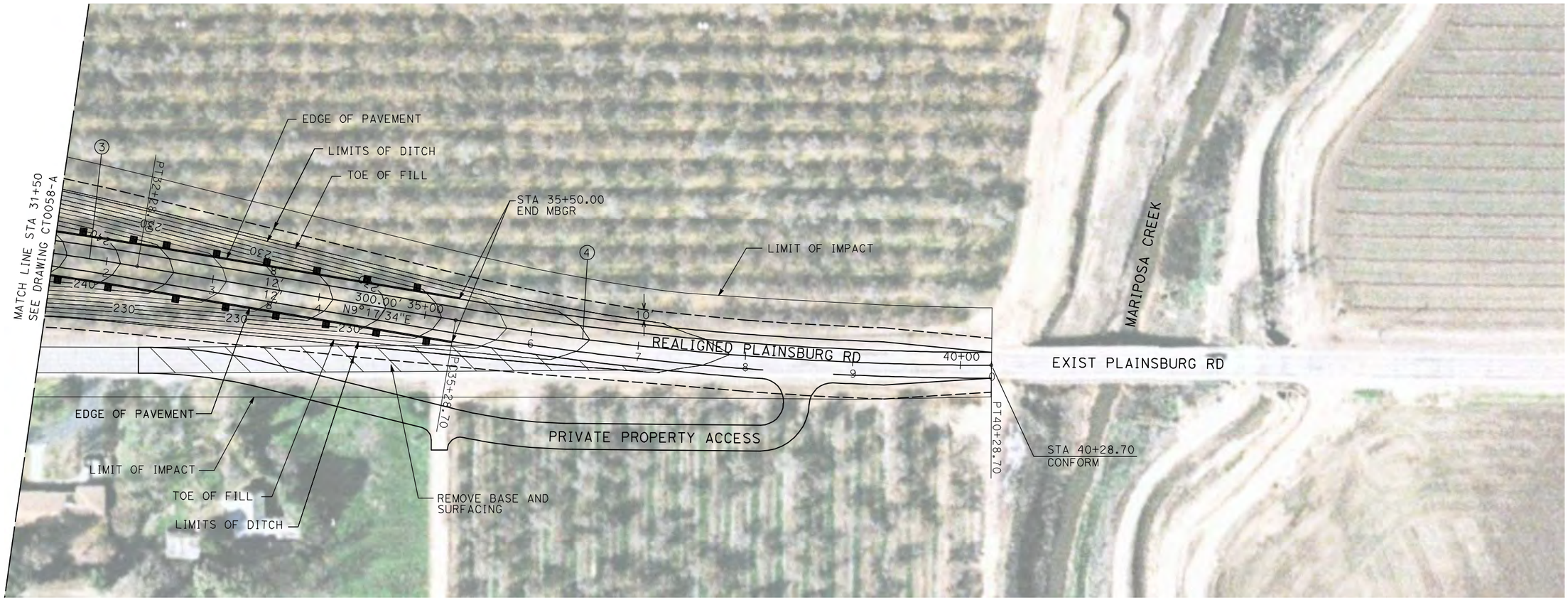
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 2 OF 3

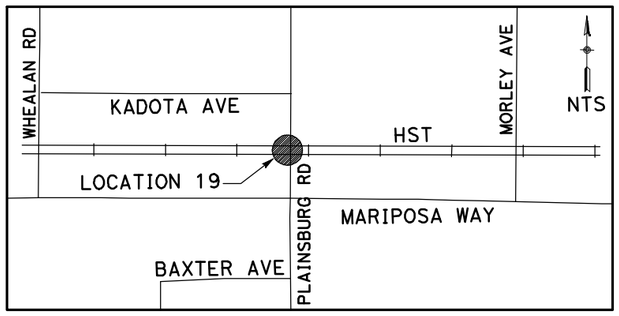
CONTRACT NO. HST06-007
DRAWING NO. CT0058-A
SCALE AS SHOWN
SHEET NO. ### OF ###

4/29/2011 1:58:22 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\MF-CT-0058-A.dgn
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1054-A THROUGH CT1056-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

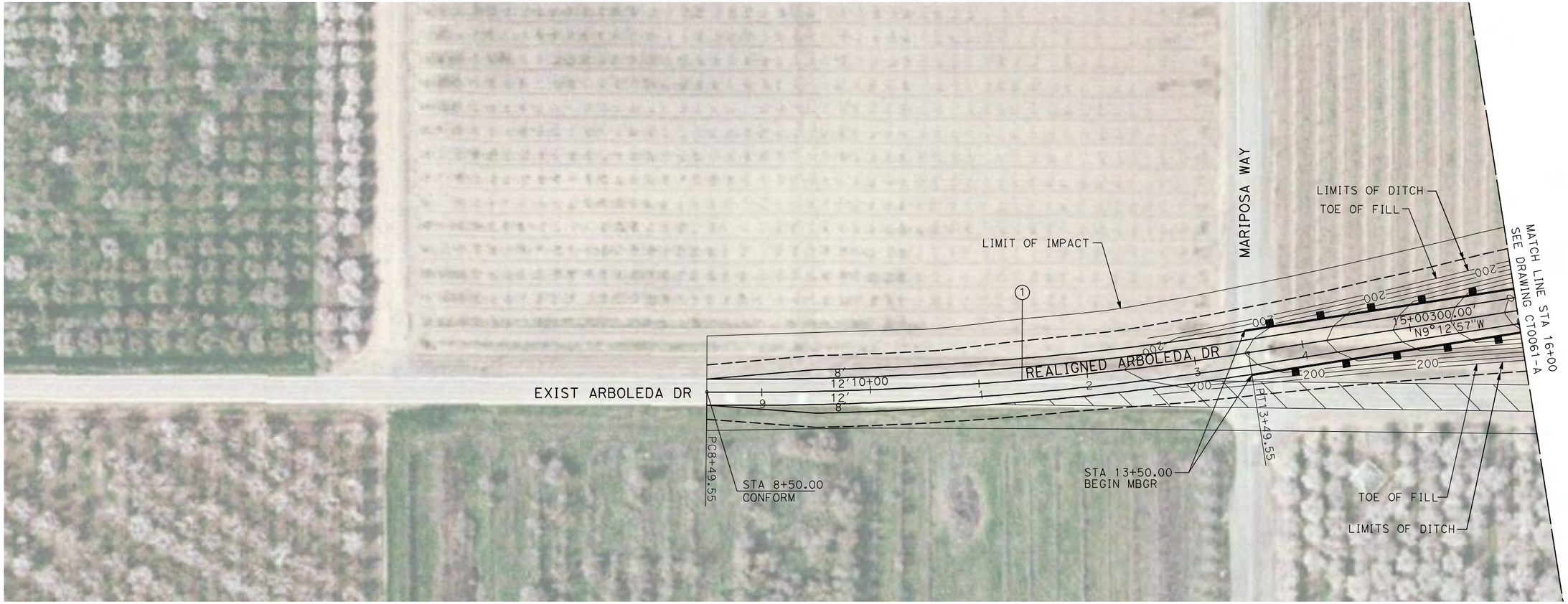
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 3 OF 3

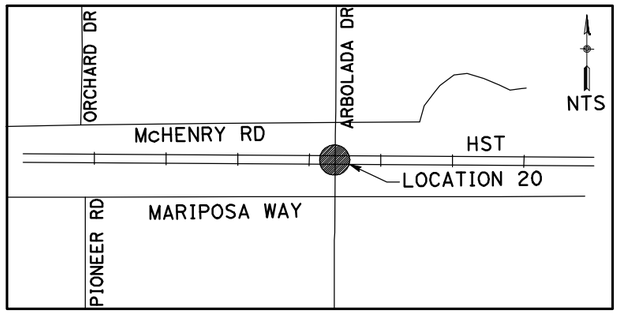
CONTRACT NO. HST06-007
DRAWING NO. CT0059-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 1:58:31 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1057-A THROUGH CT1059-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

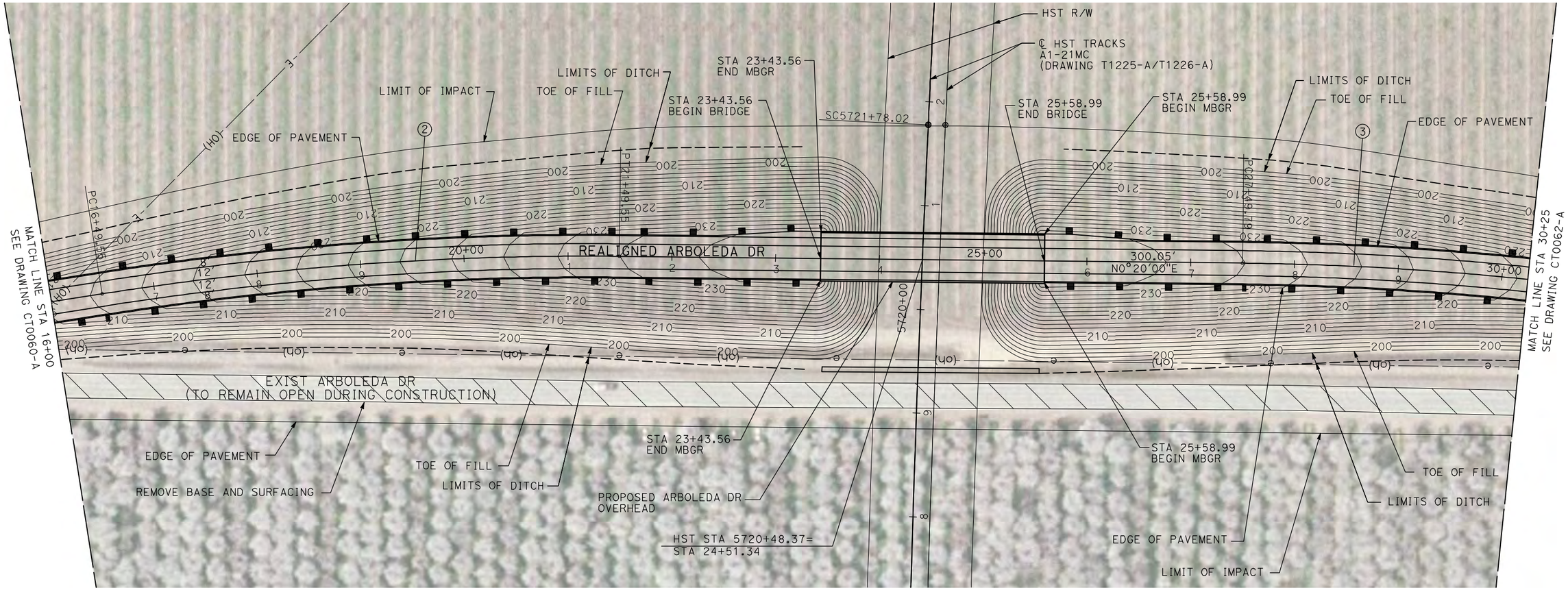
BNSF MERCED CONNECTION - AVE 21 WYE GRADE SEPARATION - S. ARBOLEDA DR LAYOUT
SHEET 1 OF 3

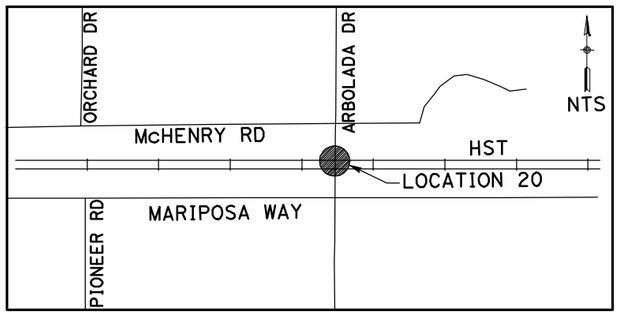
CONTRACT NO. HST06-007
DRAWING NO. CT0060-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1057-A THROUGH CT1059-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

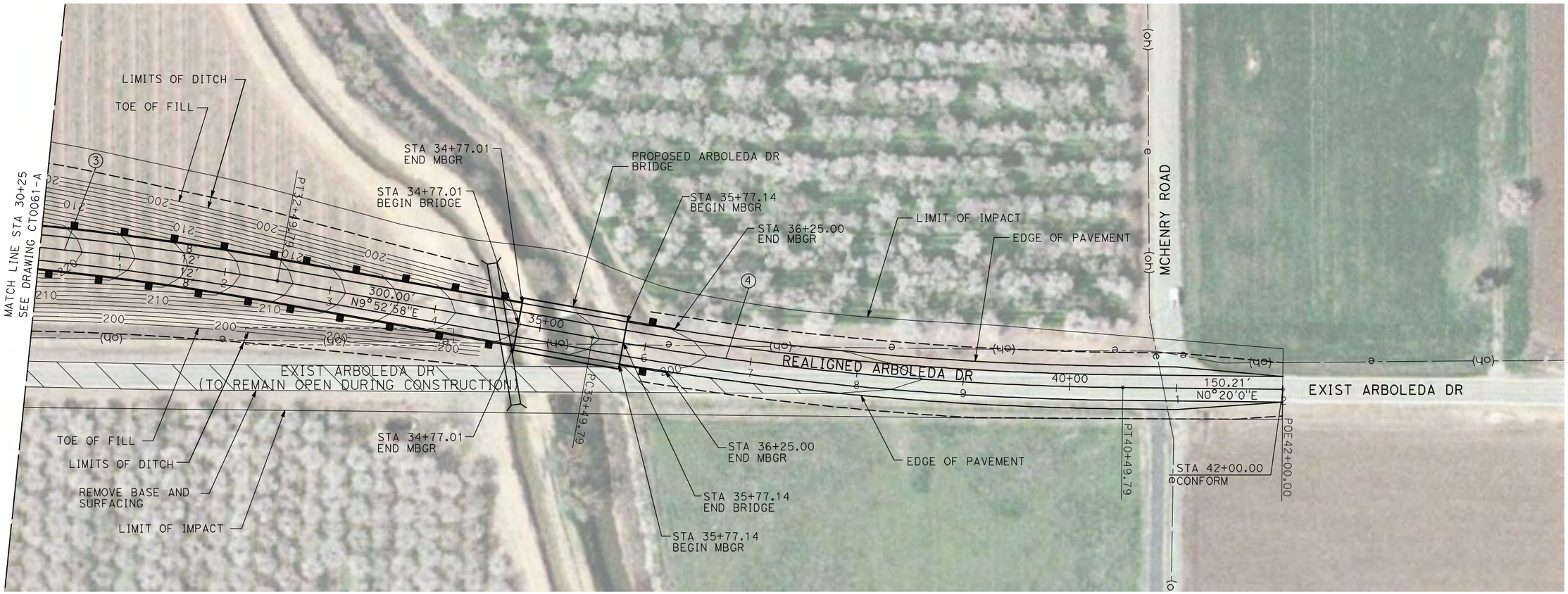
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ARBOLEDA DR
LAYOUT
SHEET 2 OF 3

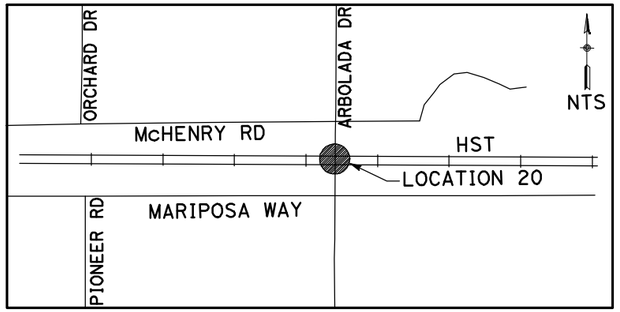
CONTRACT NO. HST06-007
DRAWING NO. CT0061-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 1:58:45 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1057-A THROUGH CT1059-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ARBOLEDA DR
LAYOUT
SHEET 3 OF 3

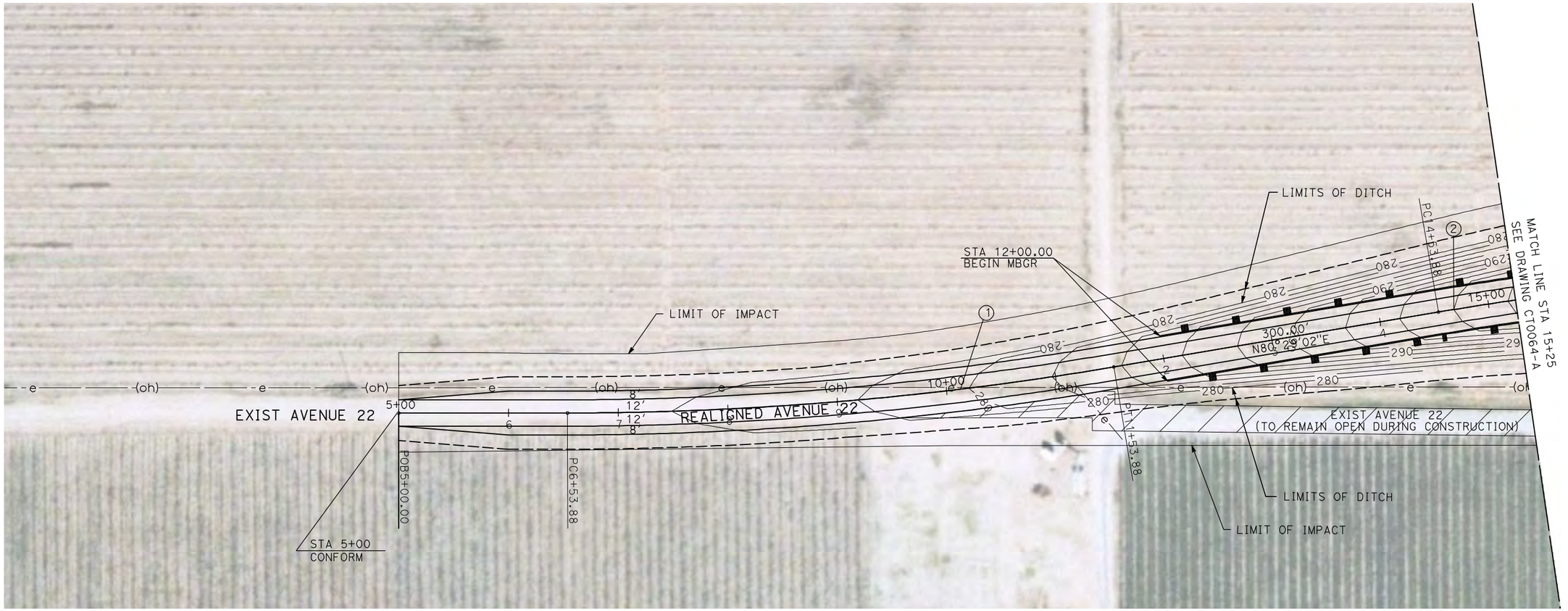
CONTRACT NO. HST06-007
DRAWING NO. CT0062-A
SCALE AS SHOWN
SHEET NO. ### OF ###

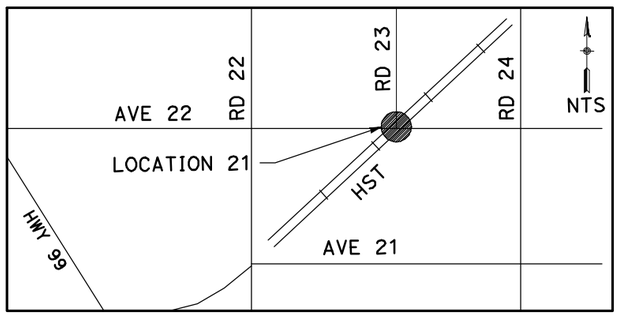
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GibsonR1

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4/29/2011 1:59:00 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1060-A THROUGH CT1062-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

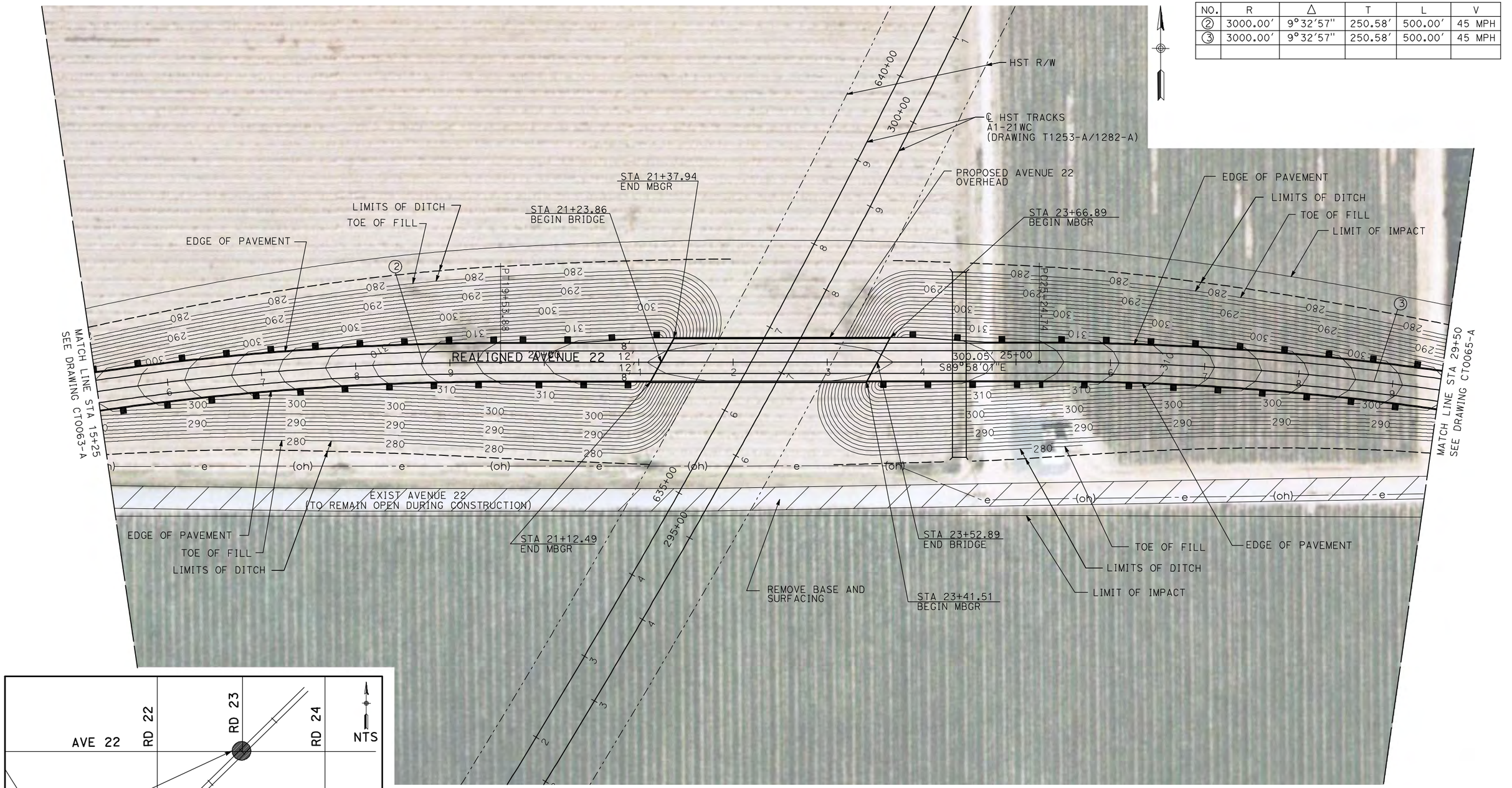
BNSF WYE CONNECTION - AVE 21 WYE
GRADE SEPARATION - AVENUE 22
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0063-A
SCALE AS SHOWN
SHEET NO. ### OF ###

I:\cnsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\MF-CT-0064-A.dgn
4/29/2011 1:59:06 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1060-A THROUGH CT1062-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
15% DESIGN
SUBMITTAL

NOT FOR
CONSTRUCTION

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

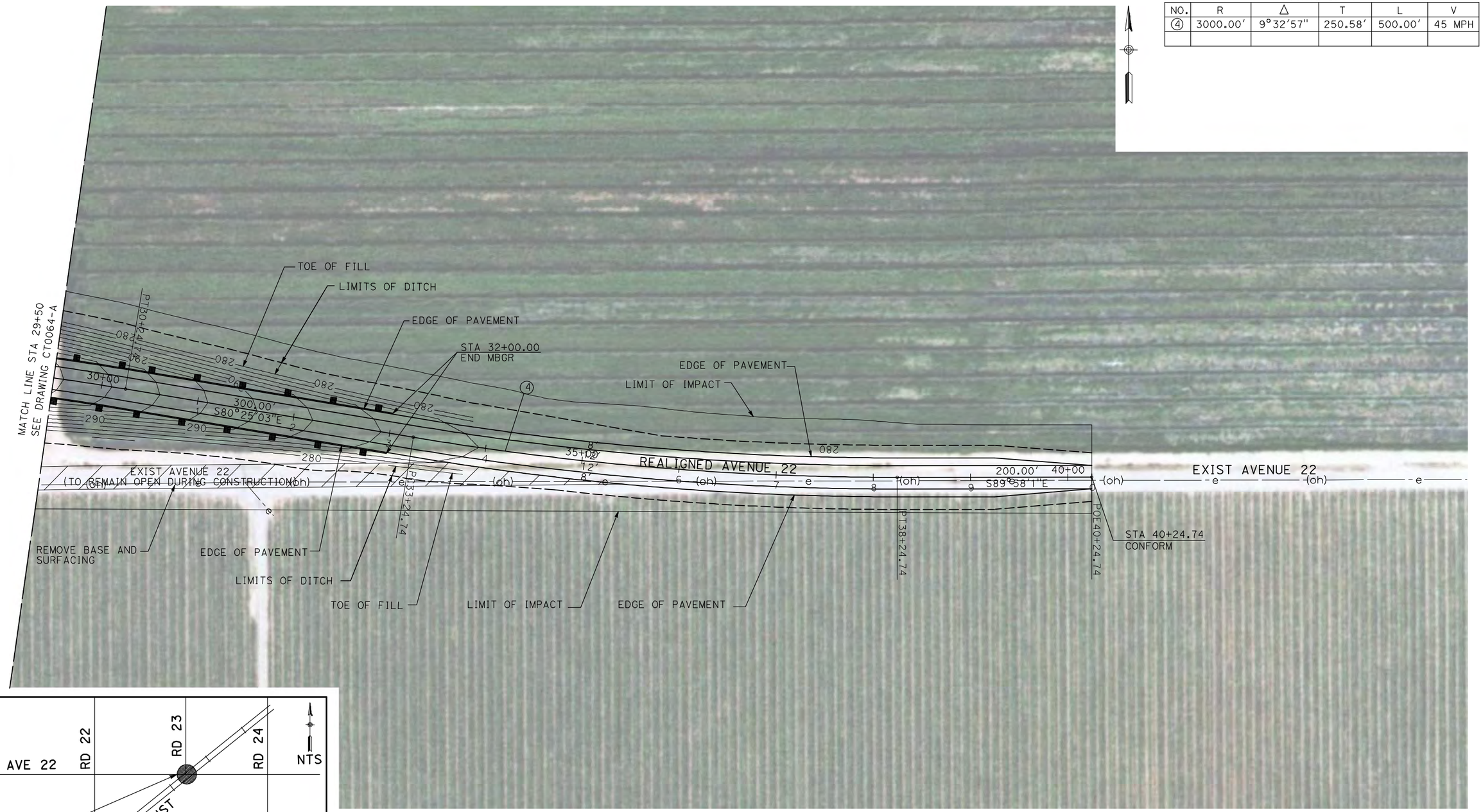
BNSF WYE CONNECTION - AVE 21 WYE
GRADE SEPARATION - AVENUE 22
LAYOUT
SHEET 2 OF 3

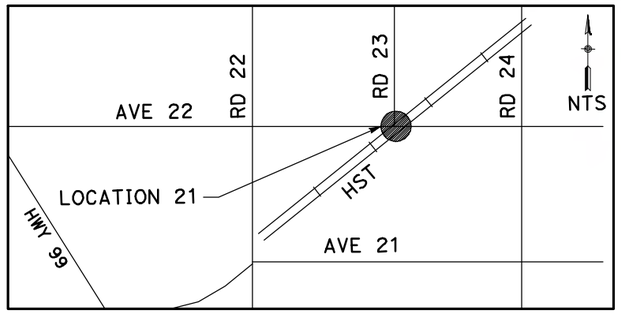
CONTRACT NO. HSR06-007
DRAWING NO. CT0064-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1060-A THROUGH CT1062-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

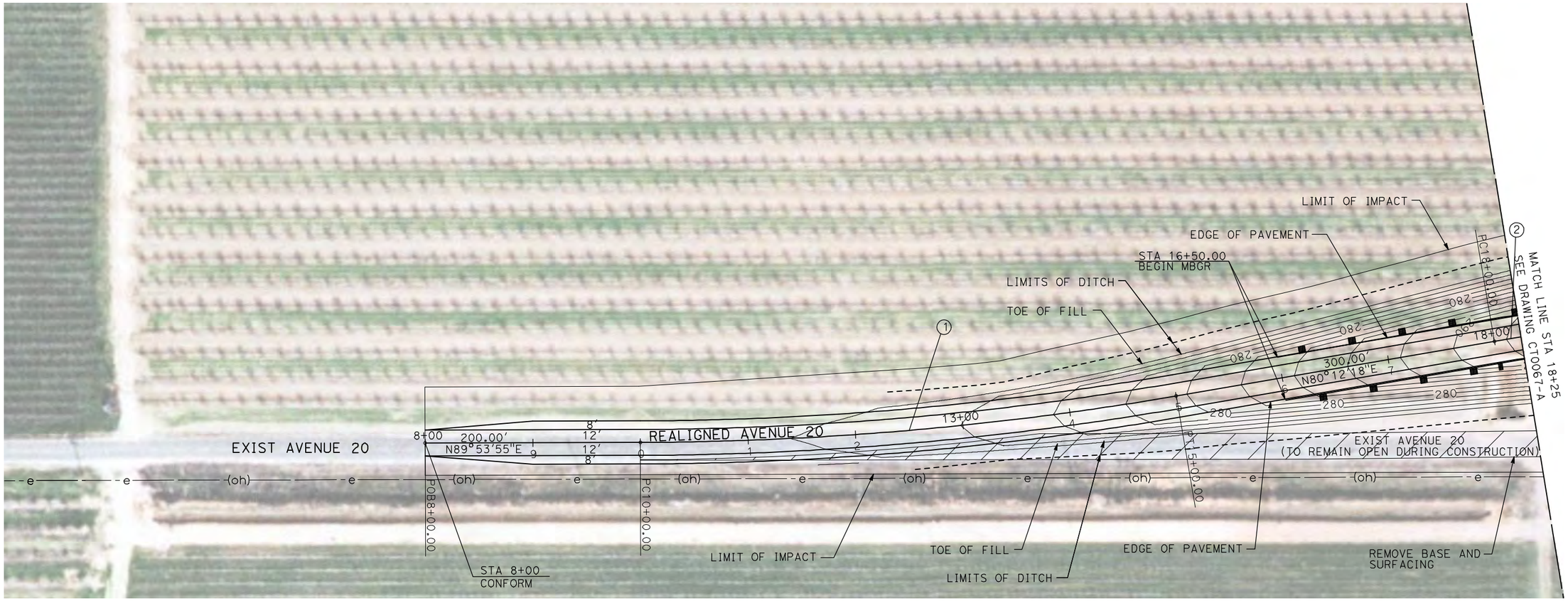
BNSF WYE CONNECTION - AVE 21 WYE
GRADE SEPARATION - AVENUE 22
LAYOUT
SHEET 3 OF 3

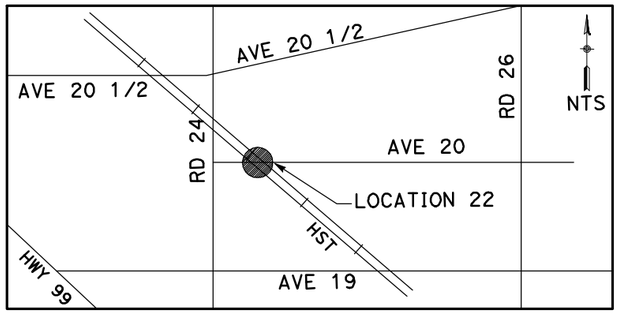
CONTRACT NO. HST06-007
DRAWING NO. CT0065-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 1:59:22 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1063-A THROUGH CT1065-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT0066-A
SCALE AS SHOWN
SHEET NO. ### OF ###

| CURVE DATA | | | | | |
|---|---|---|---|---|---|
| NO. | R | Δ | T | L | V |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |

HST R/W

℄ HST TRACKS
A1-21ML
(DRAWING T1110-A)

STA 25+55.85
BEGIN MBGR

STA 23+67.58
END MBGR

STA 25+91.64
END BRIDGE

PROPOSED AVENUE 20
OVERHEAD

LIMITS OF DITCH

TOE OF FILL

EDGE OF PAVEMENT

TOE OF FILL

LIMITS OF DITCH

LIMIT OF IMPACT

MATCH LINE STA 18+25
SEE DRAWING CT0066-A

REALIGNED AVENUE 20

300.05′
N89°53′55"E

MATCH LINE STA 32+50
SEE DRAWING CT0068-A

300.00′
S80°33′7"E

EXIST AVENUE 20
(TO REMAIN OPEN DURING CONSTRUCTION)

LIMIT OF IMPACT

TOE OF FILL

LIMITS OF DITCH

STA 24+03.78
BEGIN BRIDGE

STA 24+33.02
END MBGR

REMOVE BASE AND
SURFACING

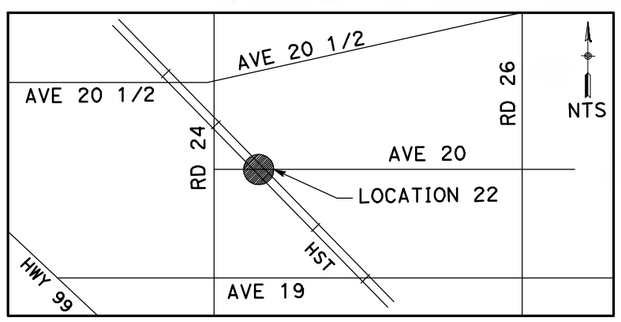
HST STA 832+59.65=
STA 24+99.03

STA 26+20.79
BEGIN MBGR

EDGE OF PAVEMENT

LIMITS OF DITCH

TOE OF FILL




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1063-A THROUGH CT1065-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

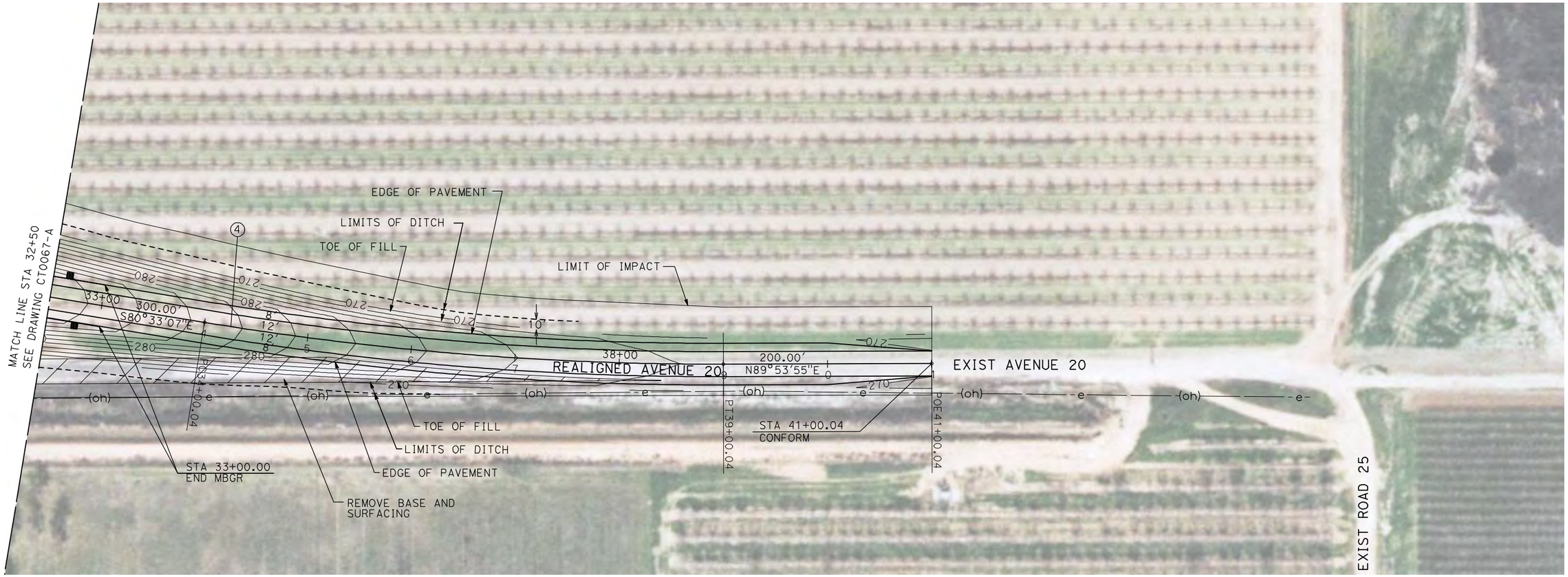
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20
LAYOUT
SHEET 2 OF 3

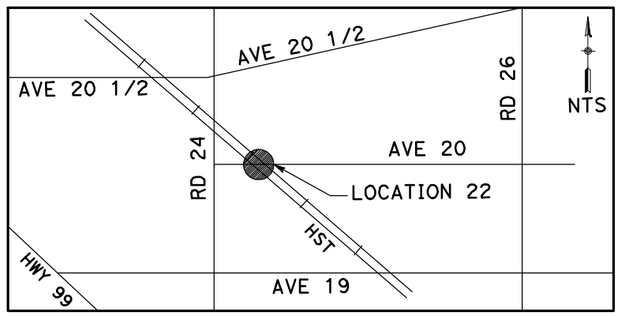
CONTRACT NO. HST06-007
DRAWING NO. CT0067-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 1:59:29 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1063-A THROUGH CT1065-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

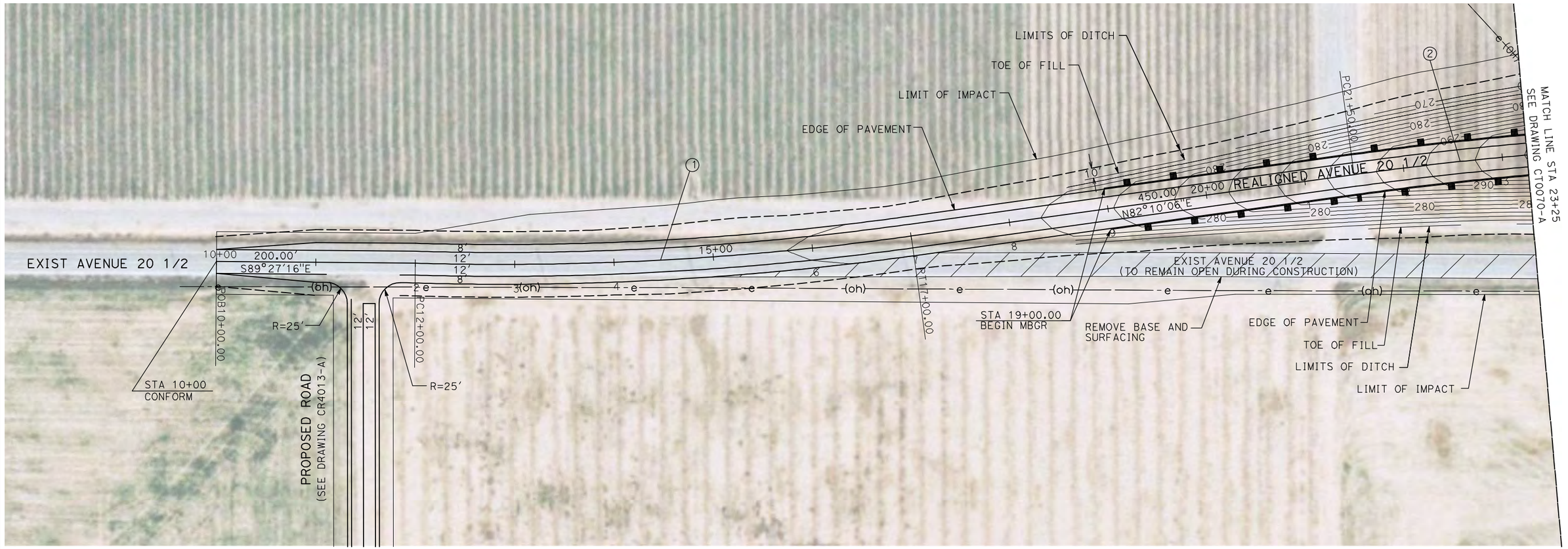
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20
LAYOUT
SHEET 3 OF 3

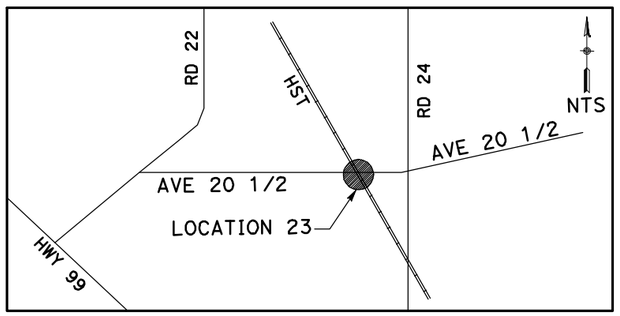
CONTRACT NO. HSR06-007
DRAWING NO. CT0068-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3500.00′ | 8°11′06" | 250.43′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1066-A THROUGH CT1068-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20 1/2
LAYOUT
SHEET 1 OF 3

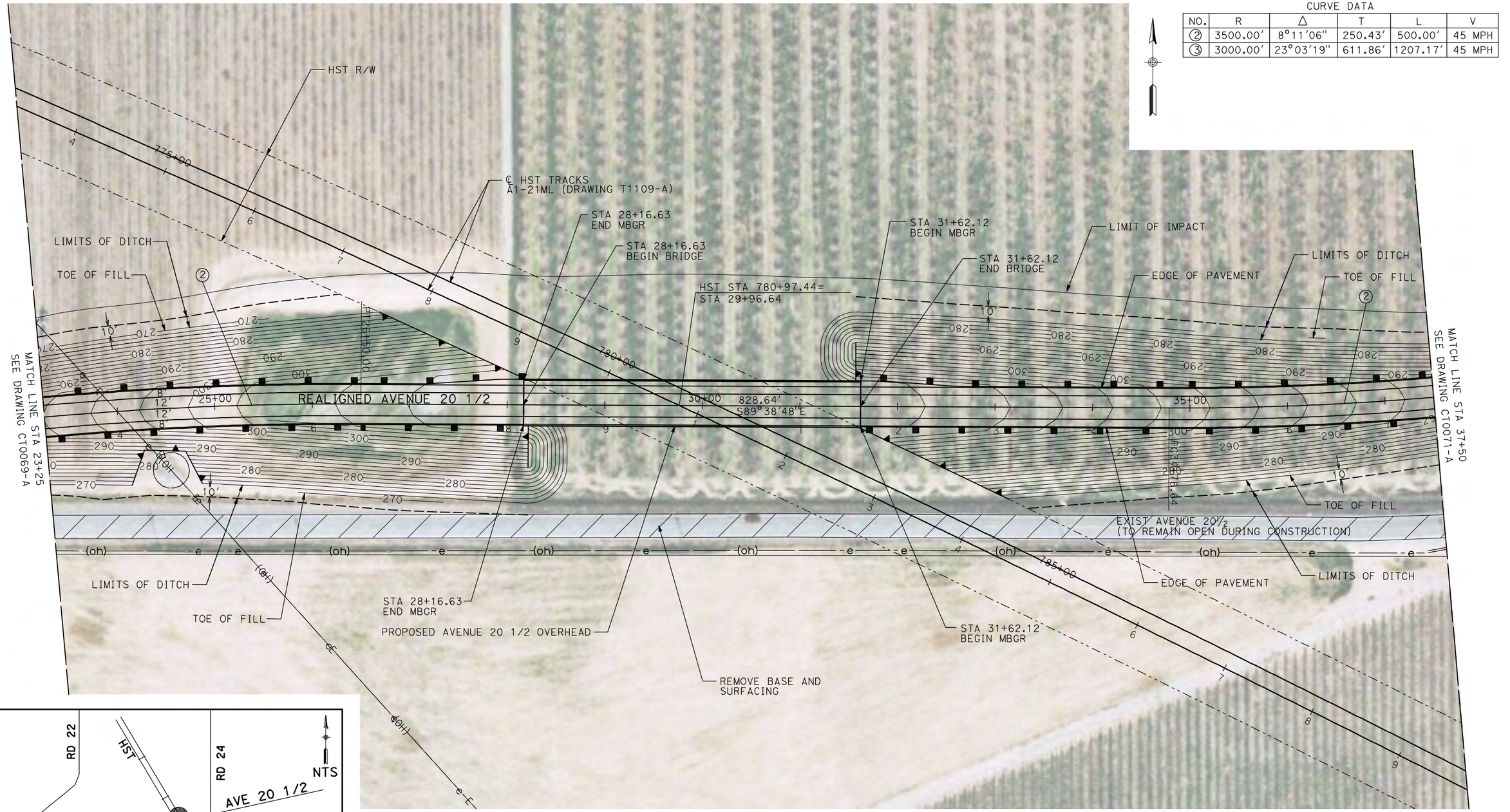
CONTRACT NO. HST06-007
DRAWING NO. CT0069-A
SCALE AS SHOWN
SHEET NO. ### OF ###

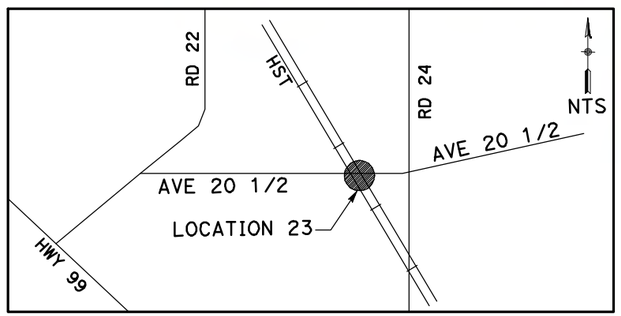
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GibsonR1

i:\chsr\6002962\task-02_merged-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0070-A.dgn
4/29/2011 1:59:51 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3500.00′ | 8°11′06" | 250.43′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 23°03′19" | 611.86′ | 1207.17′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1066-A THROUGH CT1068-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
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Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

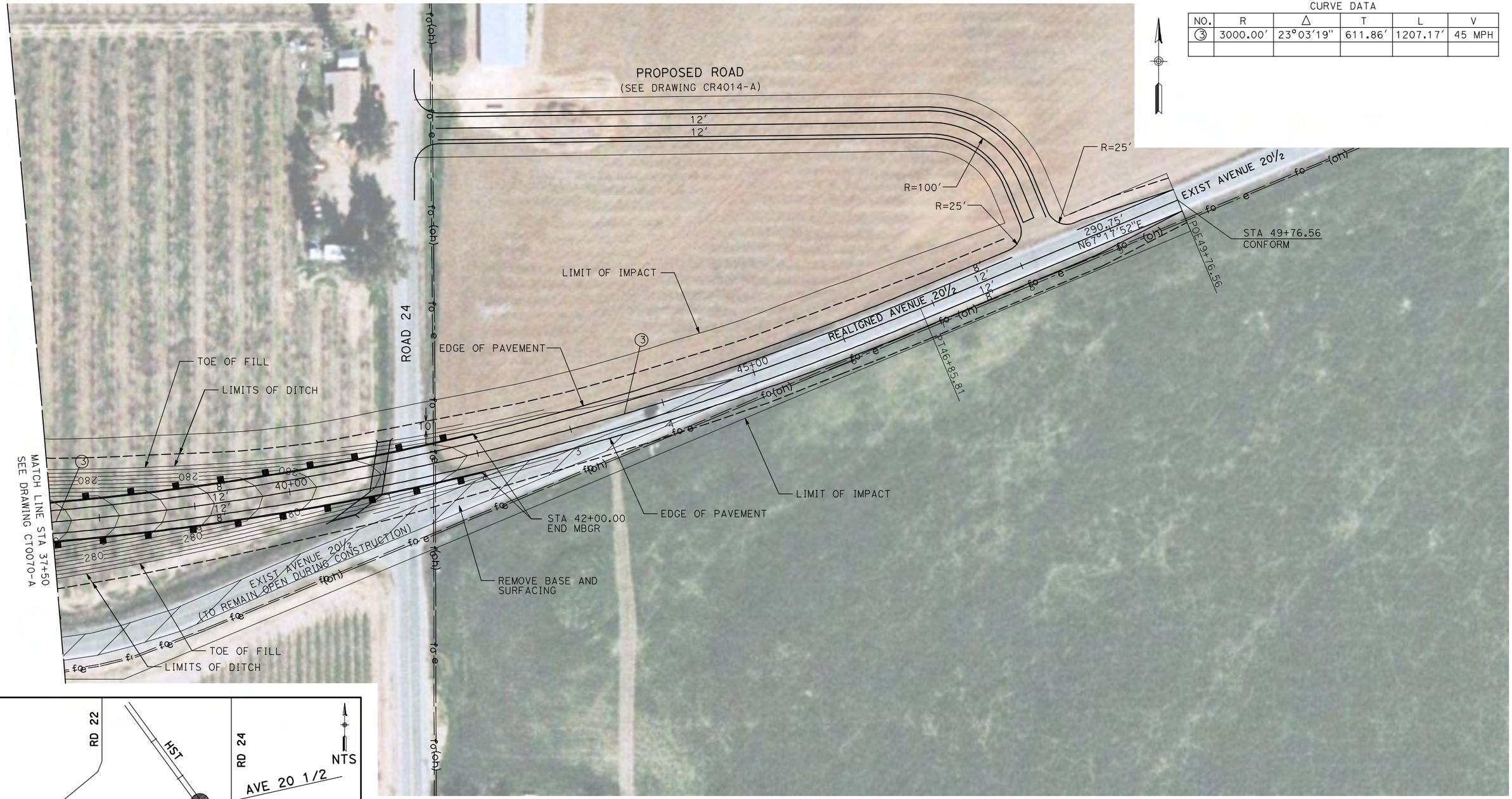
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20 1/2
LAYOUT
SHEET 2 OF 3

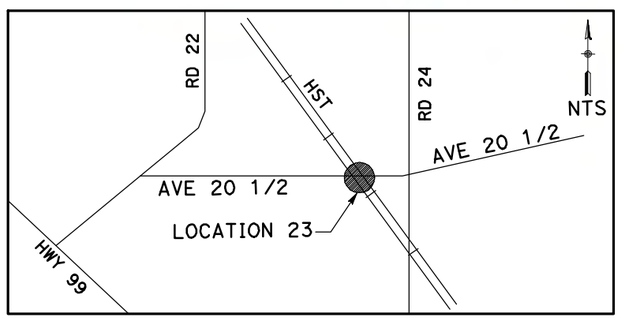
CONTRACT NO. HSR06-007
DRAWING NO. CT0070-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 1:59:58 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 23°03′19″ | 611.86′ | 1207.17′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1066-A THROUGH CT1068-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**
**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

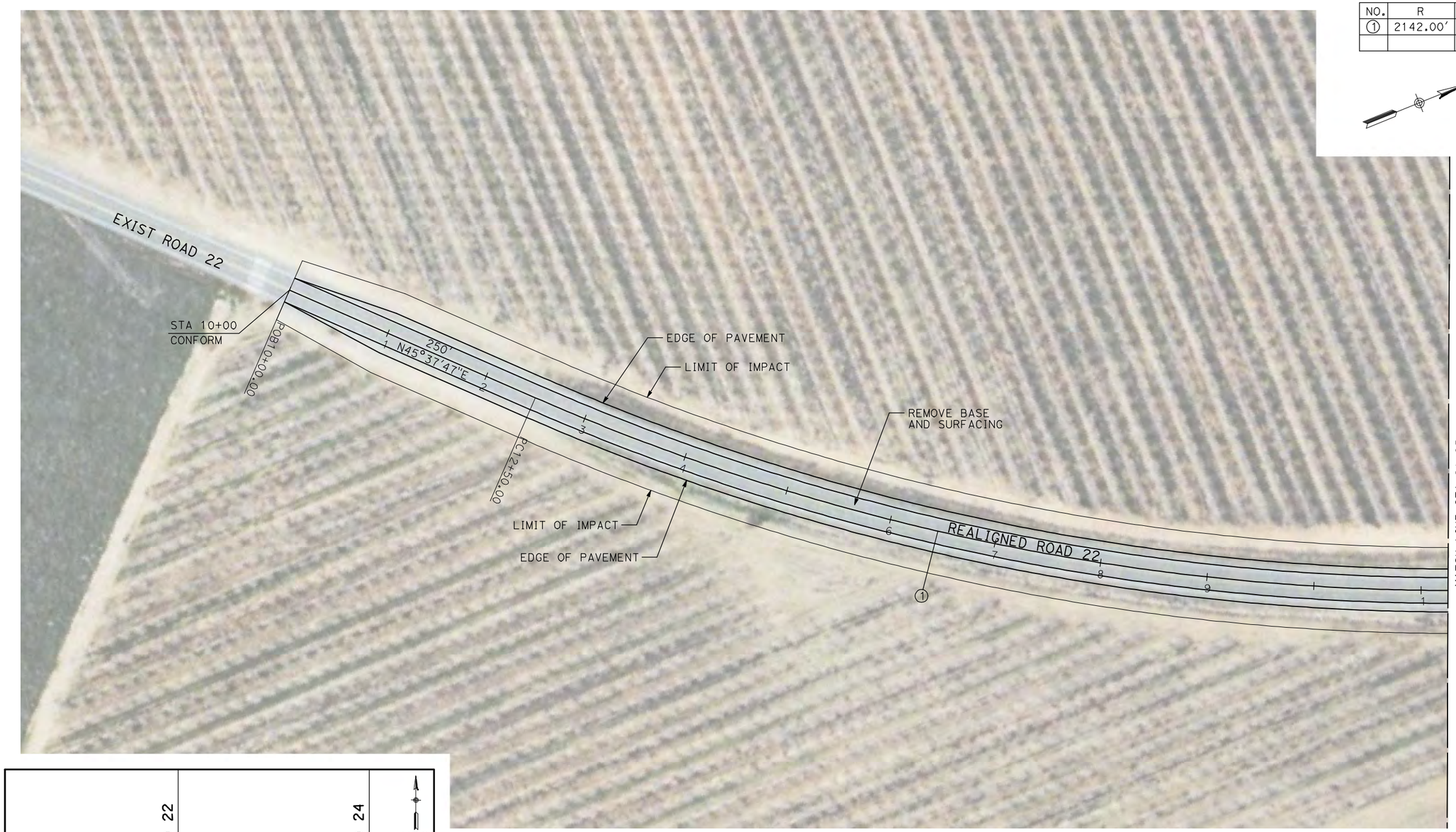
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20 1/2
LAYOUT
SHEET 3 OF 3

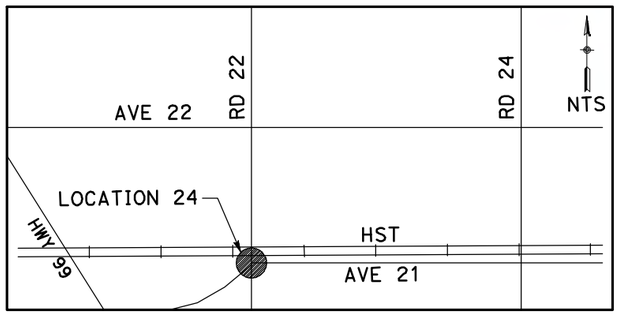
CONTRACT NO. HST06-007
DRAWING NO. CT0071-A
SCALE AS SHOWN
SHEET NO. ### OF ###

i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0073-A.dgn
4/29/2011 2:00:05 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 2142.00′ | 24°59′51" | 474.82′ | 934.53′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1069-A THROUGH CT1071-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

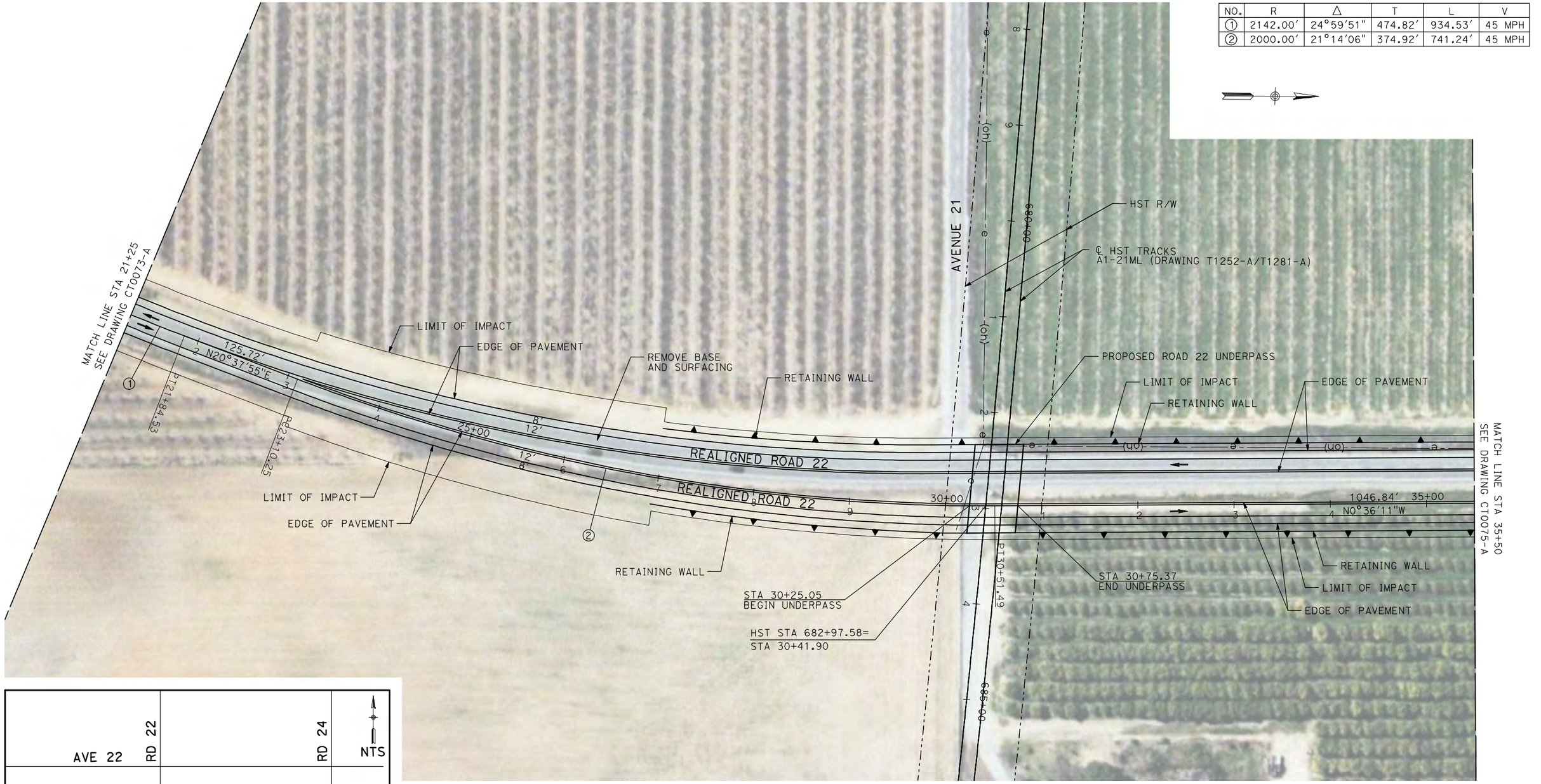
BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - ROAD 22
LAYOUT
SHEET 1 OF 3

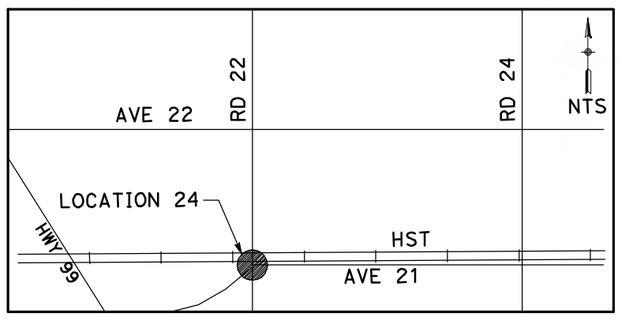
CONTRACT NO. HST06-007
DRAWING NO. CT0073-A
SCALE AS SHOWN
SHEET NO. ### OF ###

I:\cher\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\MF-CT-0074-A.dgn
4/29/2011 2:00:11 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 2142.00′ | 24°59′51" | 474.82′ | 934.53′ | 45 MPH |
| ② | 2000.00′ | 21°14′06" | 374.92′ | 741.24′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1069-A THROUGH CT1071-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - ROAD 22
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT0074-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 5000.00′ | 4°35′33" | 200.49′ | 400.76′ | 45 MPH |
| ④ | 5000.00′ | 4°35′33" | 200.49′ | 400.76′ | 45 MPH |

℄ HST TRACKS
A1-21WC (DRAWING T1107-A)

HST TRACKS

PROPOSED ROAD 22 UNDERPASS

RETAINING WALL

LIMIT OF IMPACT

EDGE OF PAVEMENT

HST STA 568+73.27=
STA 39+59.92

RETAINING WALL

LIMIT OF IMPACT

EDGE OF PAVEMENT

REMOVE BASE AND SURFACING

PC45+16.40

PT49+47.16

MATCH LINE STA 49+75
SEE BELOW

REALIGNED ROAD 22

45+00

40+00

1046.84′
N0°36′11"W

REALIGNED ROAD 22

PC40+98.33

PT44+99.09

47.3′
N5°11′43"W

③

④

EDGE OF PAVEMENT

LIMIT OF IMPACT

RETAINING WALL

RETAINING WALL

LIMIT OF IMPACT

EDGE OF PAVEMENT

MATCH LINE STA 35+50
SEE DRAWING CT0074-A

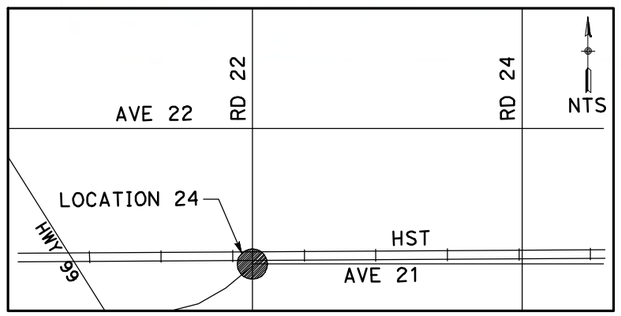
225+00

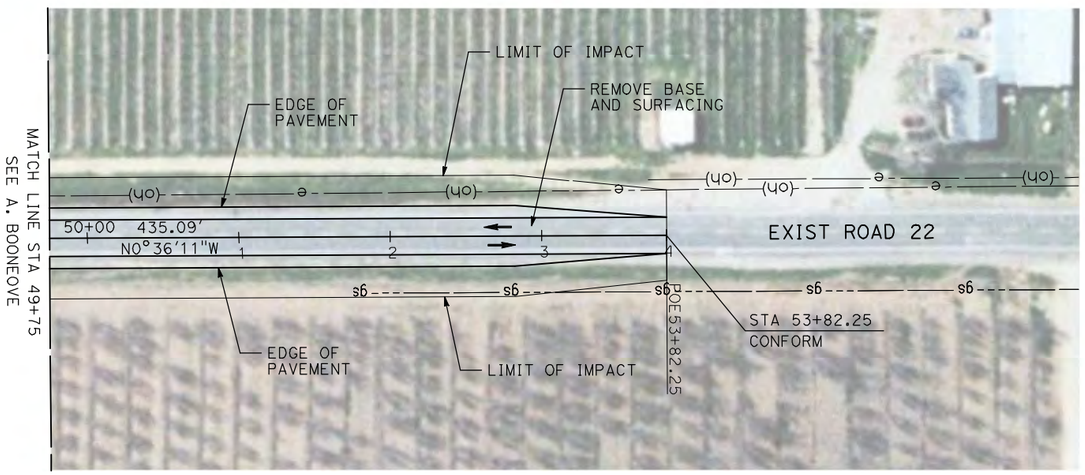
565+00

230+00

570+00

HST STA 228+36.55=
STA 39+09.25




50 0 50 100
1"=50′

NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1069-A THROUGH CT1071-A.

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

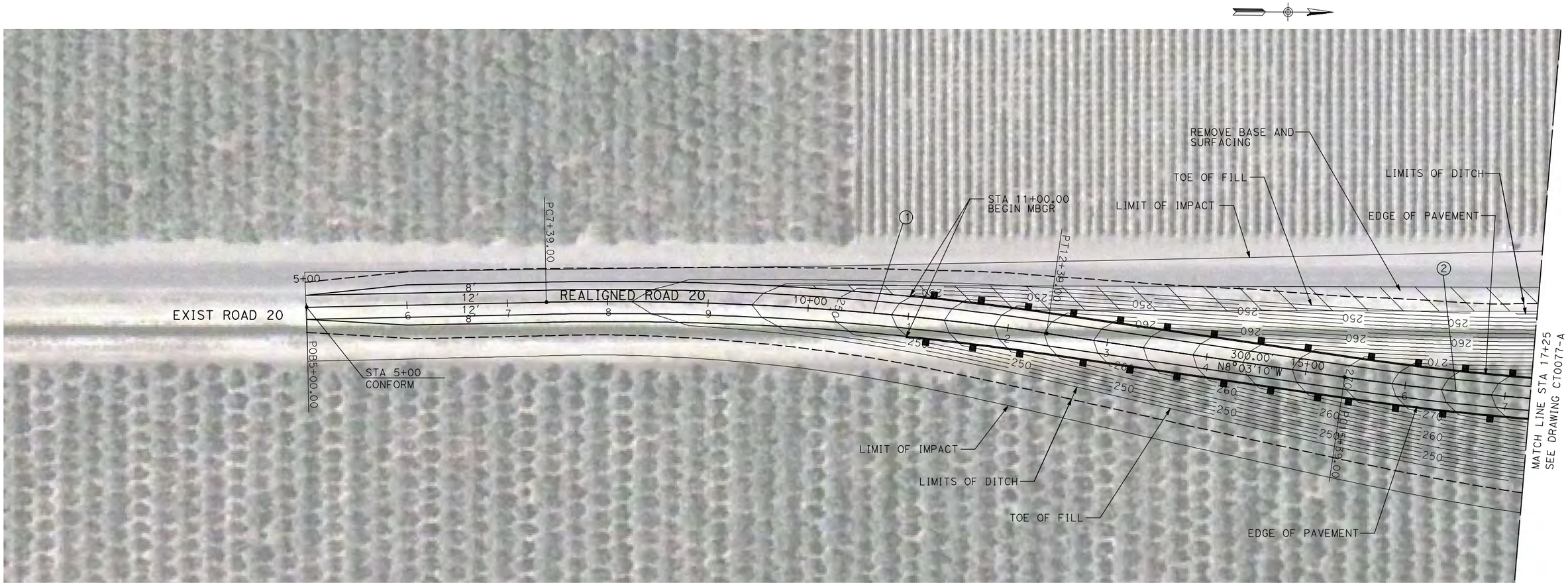
BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - ROAD 22
LAYOUT
SHEET 3 OF 3

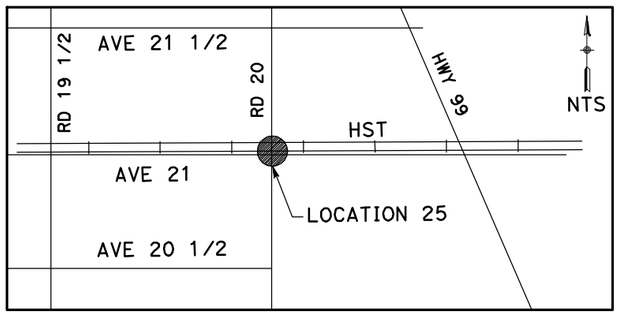
CONTRACT NO. HSR06-007
DRAWING NO. CT0075-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1072-A THROUGH CT1074-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 20
LAYOUT
SHEET 1 OF 3

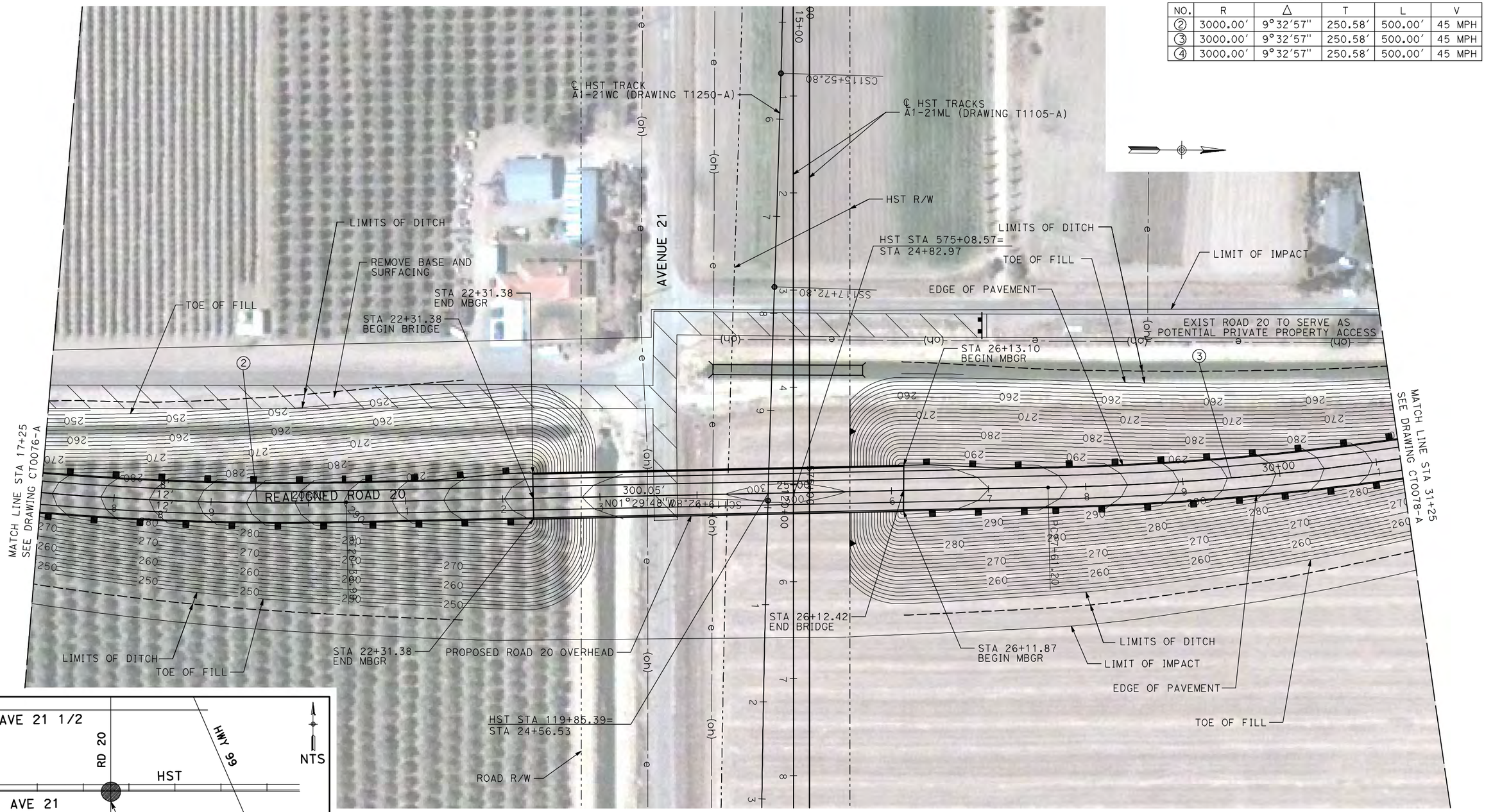
CONTRACT NO. HSR06-007
DRAWING NO. CT0076-A
SCALE AS SHOWN
SHEET NO. ### OF ###

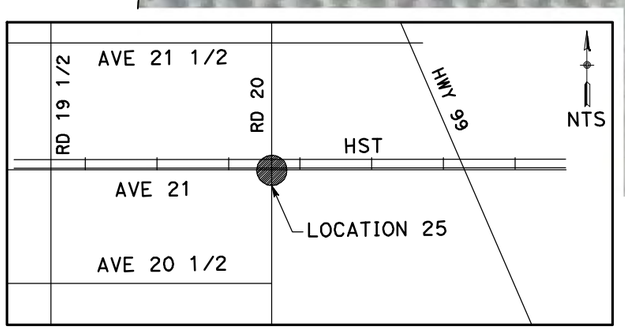
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4/29/2011 2:00:24 PM
GibsonR1

i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\volume 1a - ave 21 wye grade separation\layout\WF-CT-0077-A.dgn
4/29/2011 2:00:31 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1072-A THROUGH CT1074-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

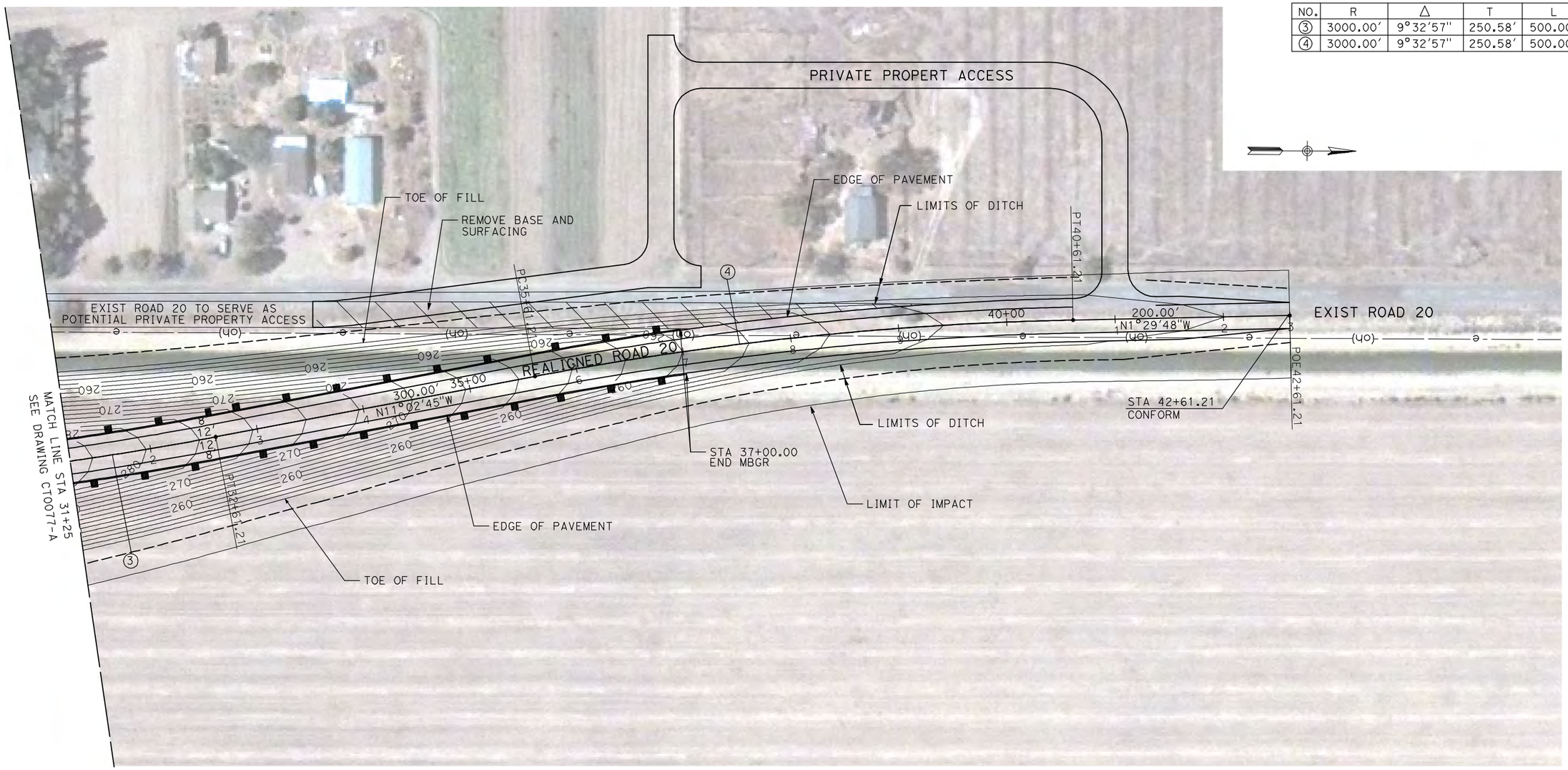
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

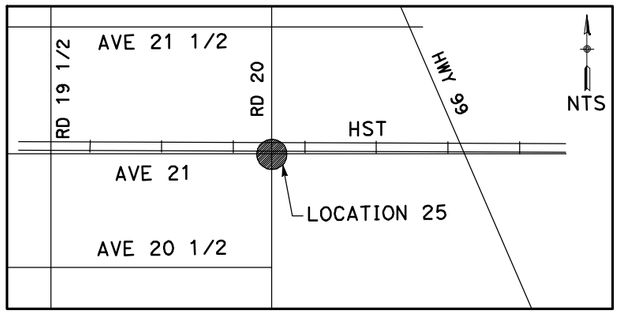
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 20
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0077-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1072-A THROUGH CT1074-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**


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Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL


CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 20
LAYOUT
SHEET 3 OF 3

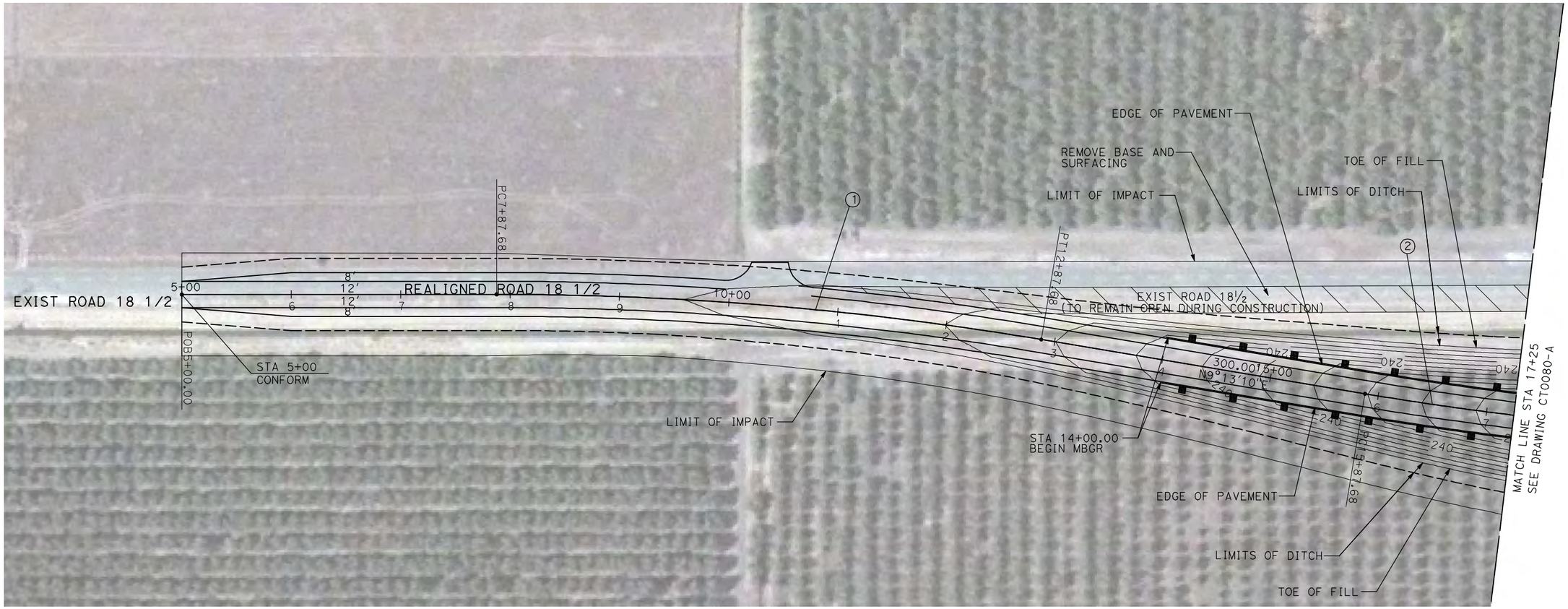
CONTRACT NO. HSR06-007
DRAWING NO. CT0078-A
SCALE AS SHOWN
SHEET NO. ### OF ###

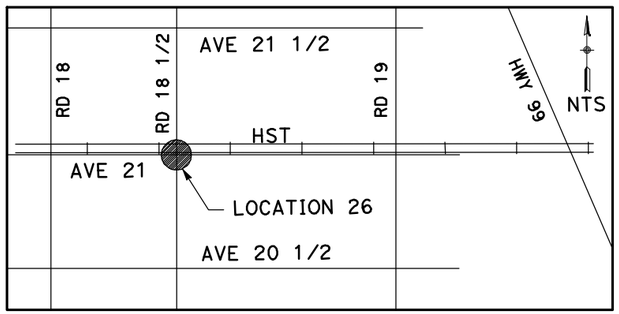

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GibsonR1

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4/29/2011 2:00:47 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1075-A THROUGH CT1077-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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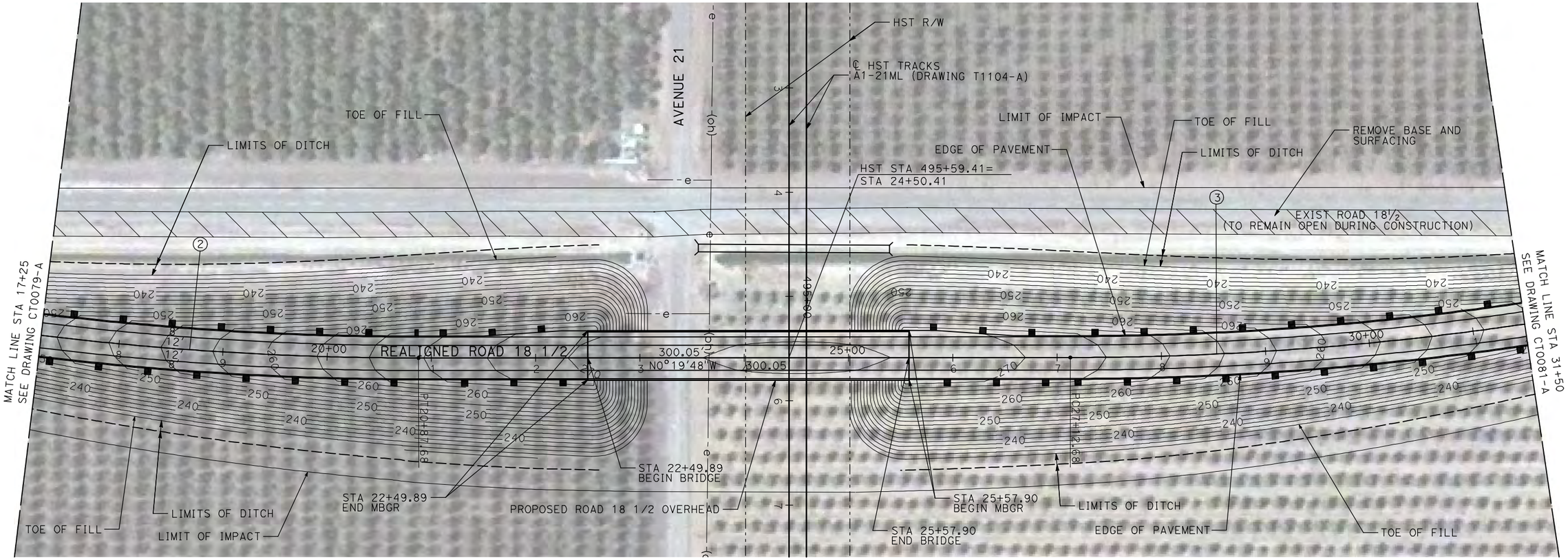
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

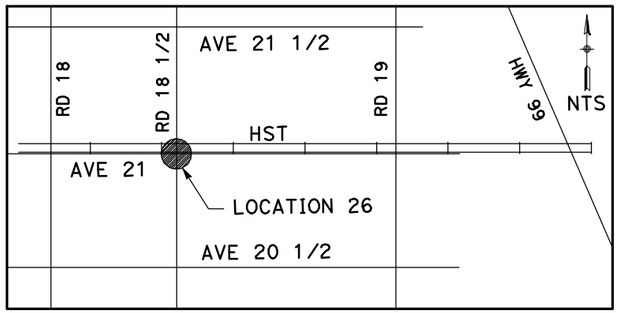
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 18 1/2
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0079-A
SCALE AS SHOWN
SHEET NO. ### OF ###

| CURVE DATA | | | | | |
|---|---|---|---|---|---|
| NO. | R | Δ | T | L | V |
| ② | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1075-A THROUGH CT1077-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**


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Sacramento, CA 95811
CH2MHILL


CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

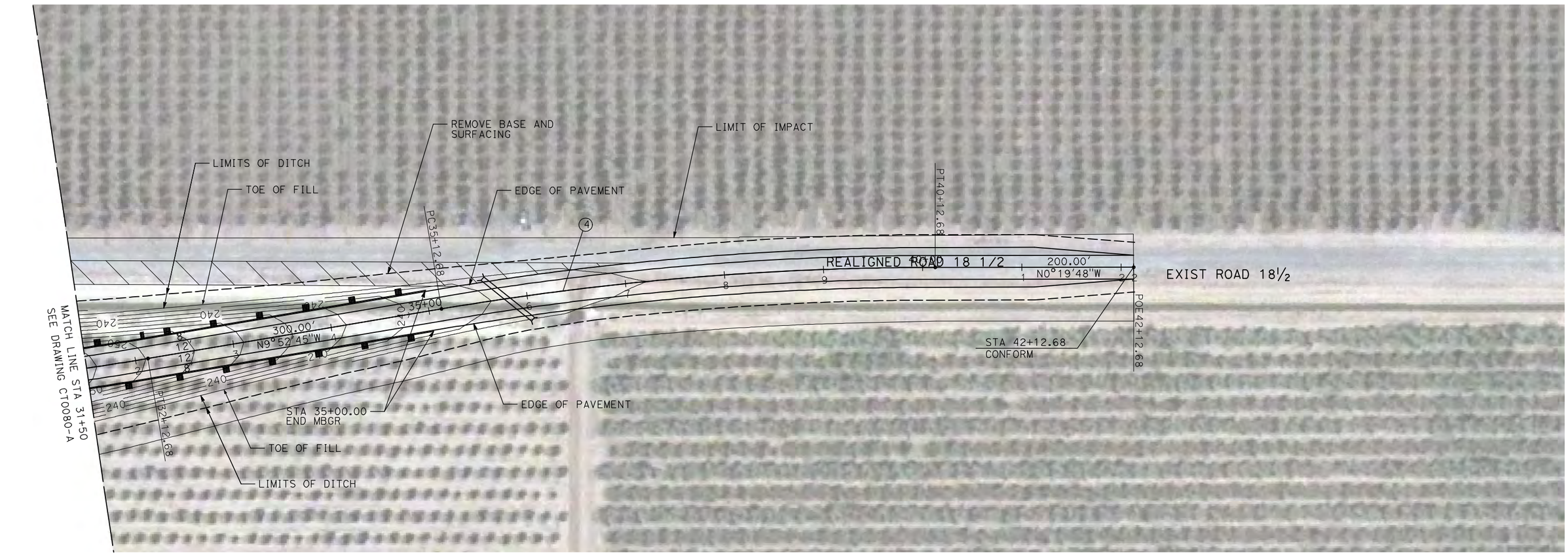
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 18 1/2
LAYOUT
SHEET 2 OF 3

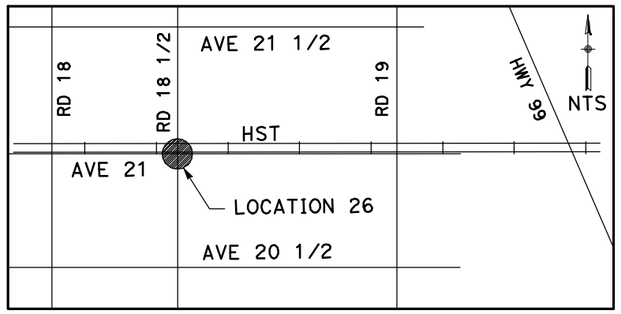
CONTRACT NO. HSR06-007
DRAWING NO. CT0080-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1075-A THROUGH CT1077-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 18 1/2
LAYOUT
SHEET 3 OF 3

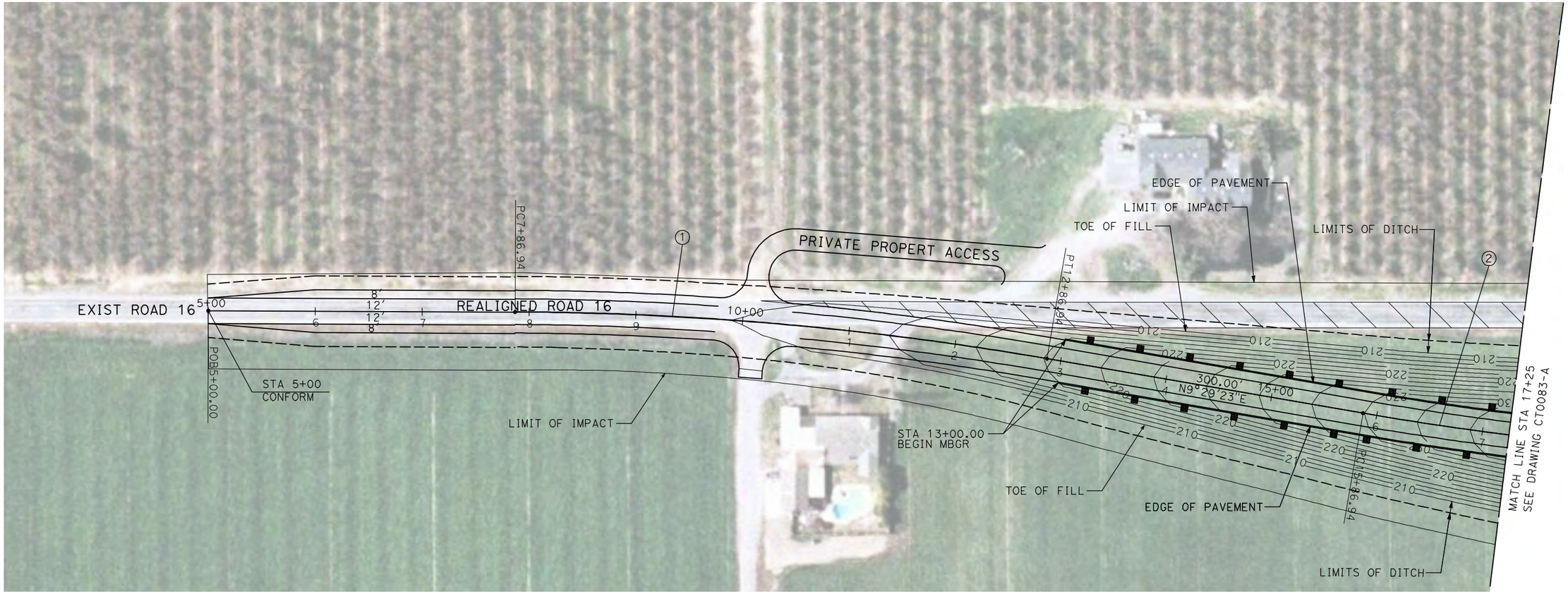
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DRAWING NO. CT0081-A
SCALE AS SHOWN
SHEET NO. ### OF ###

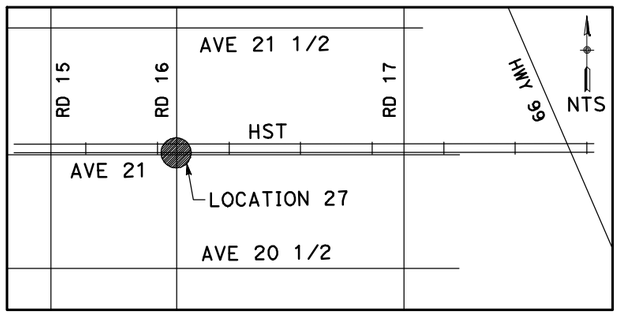
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GibsonR1

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1078-A THROUGH CT1080-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

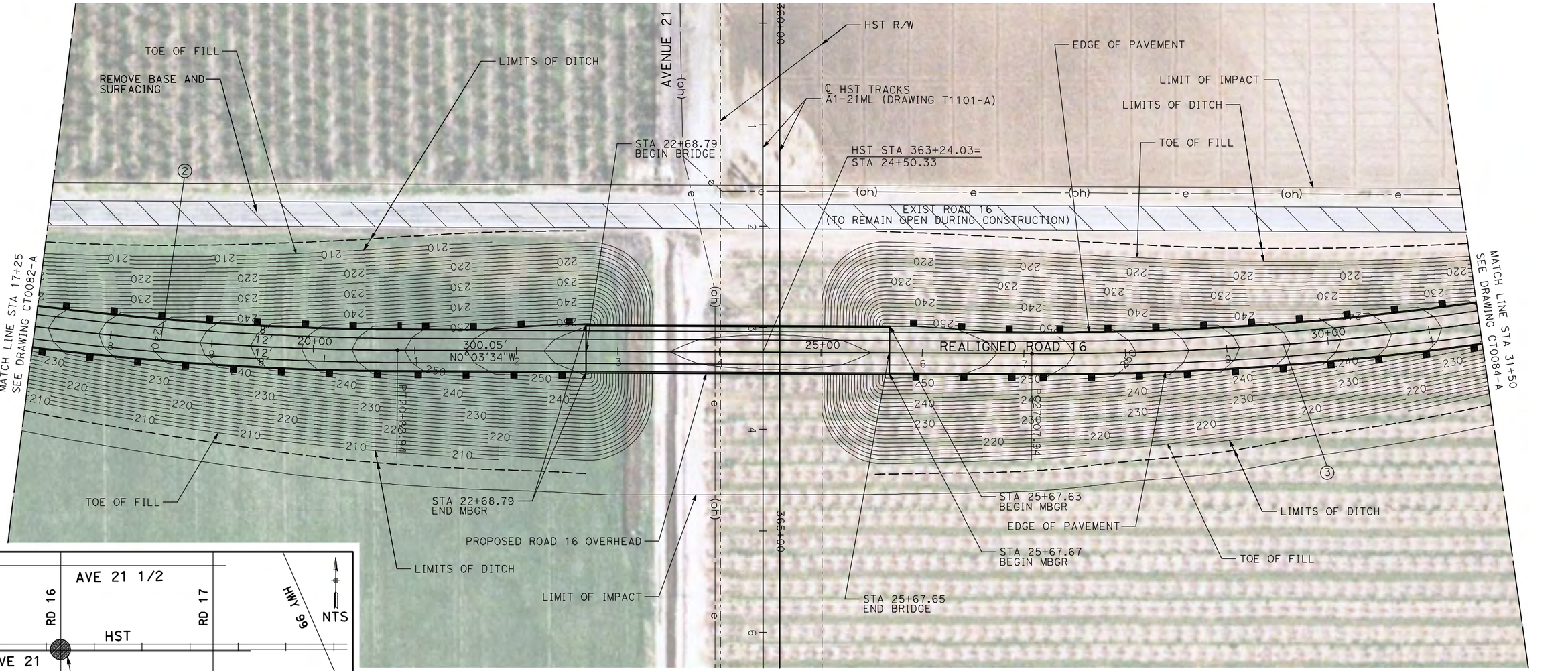
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 16
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT0082-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1078-A THROUGH CT1080-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

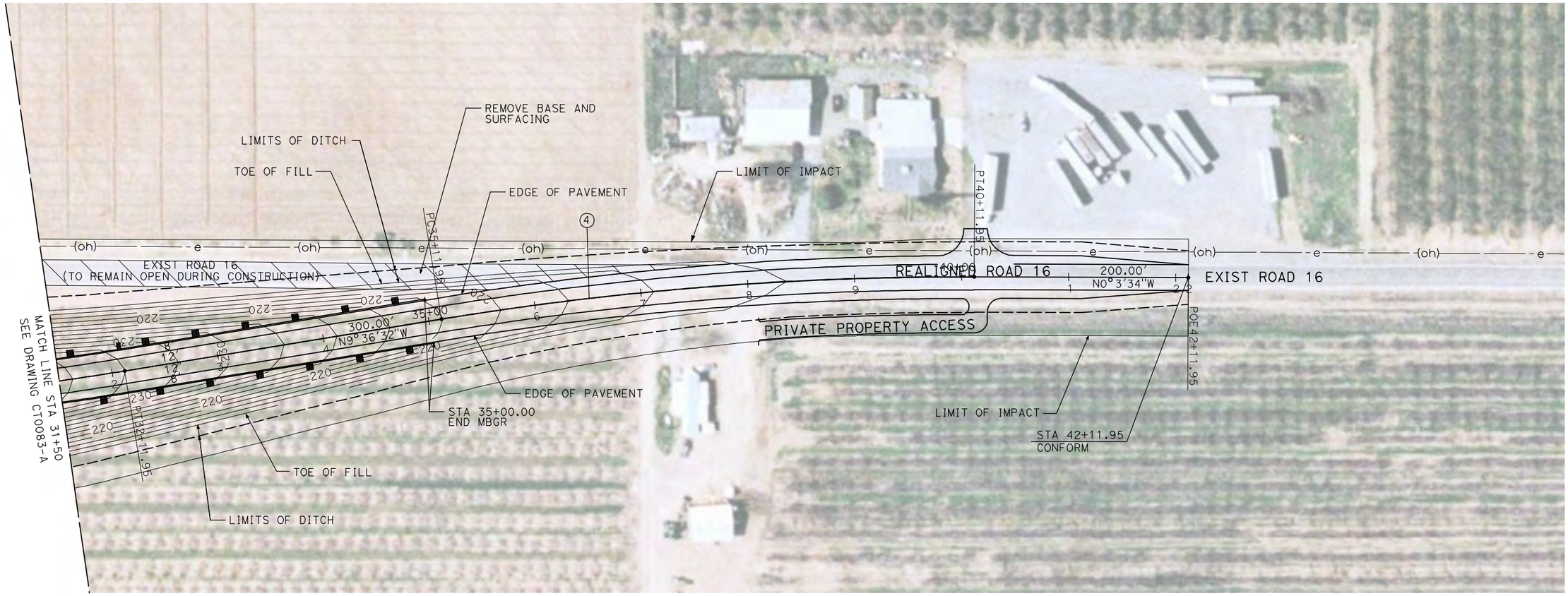
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 16
LAYOUT
SHEET 2 OF 3

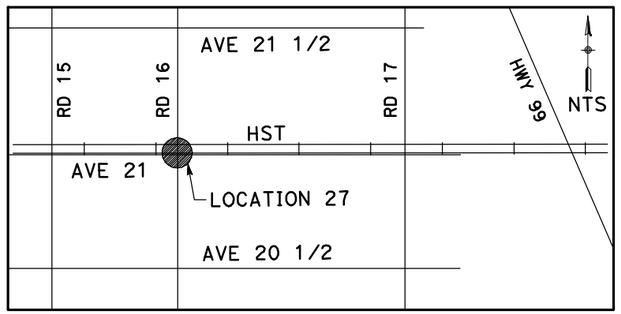
CONTRACT NO. HST06-007
DRAWING NO. CT0083-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:01:14 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1078-A THROUGH CT1080-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

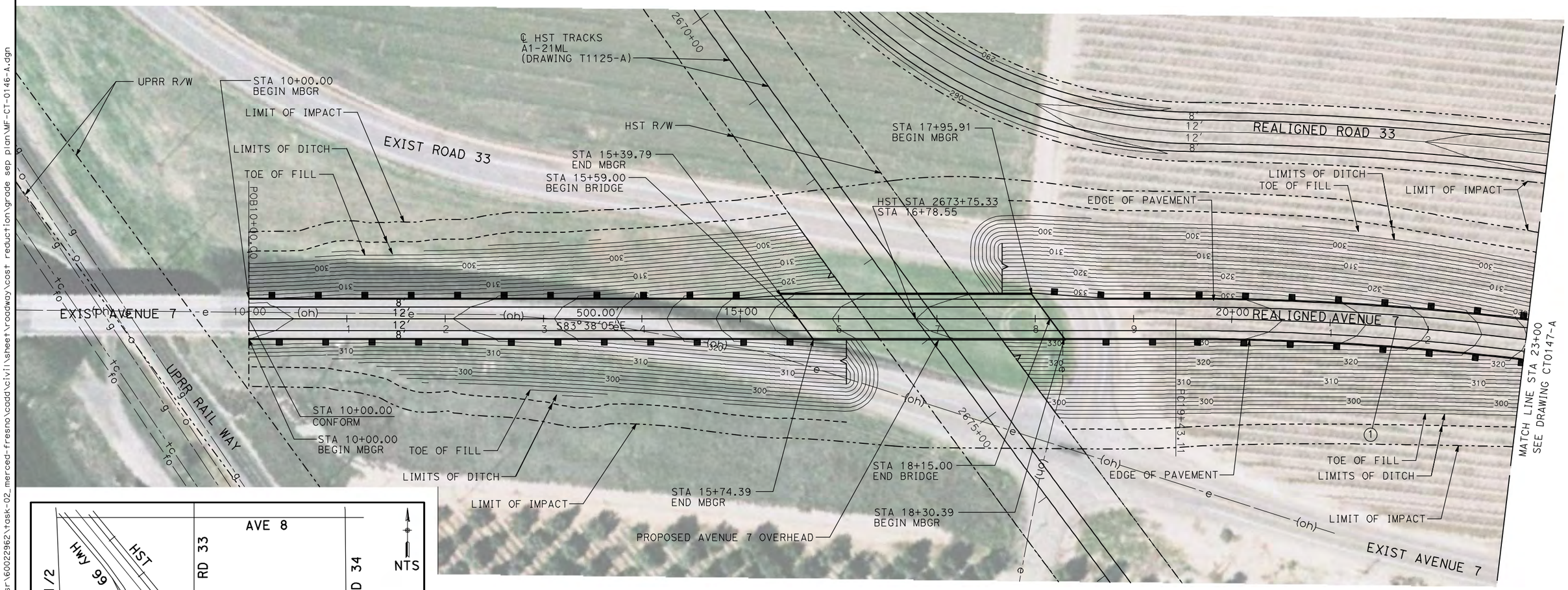
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 16
LAYOUT
SHEET 3 OF 3

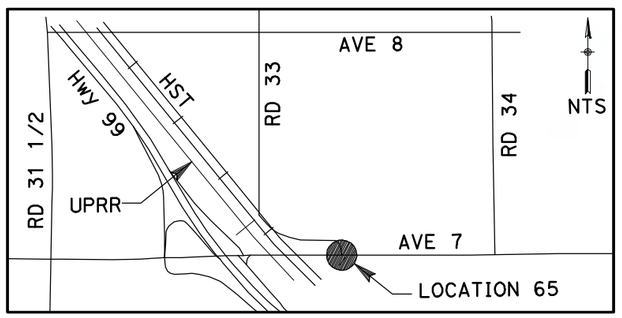
CONTRACT NO. HSR06-007
DRAWING NO. CT0084-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1146-A THROUGH CT1148-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
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Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

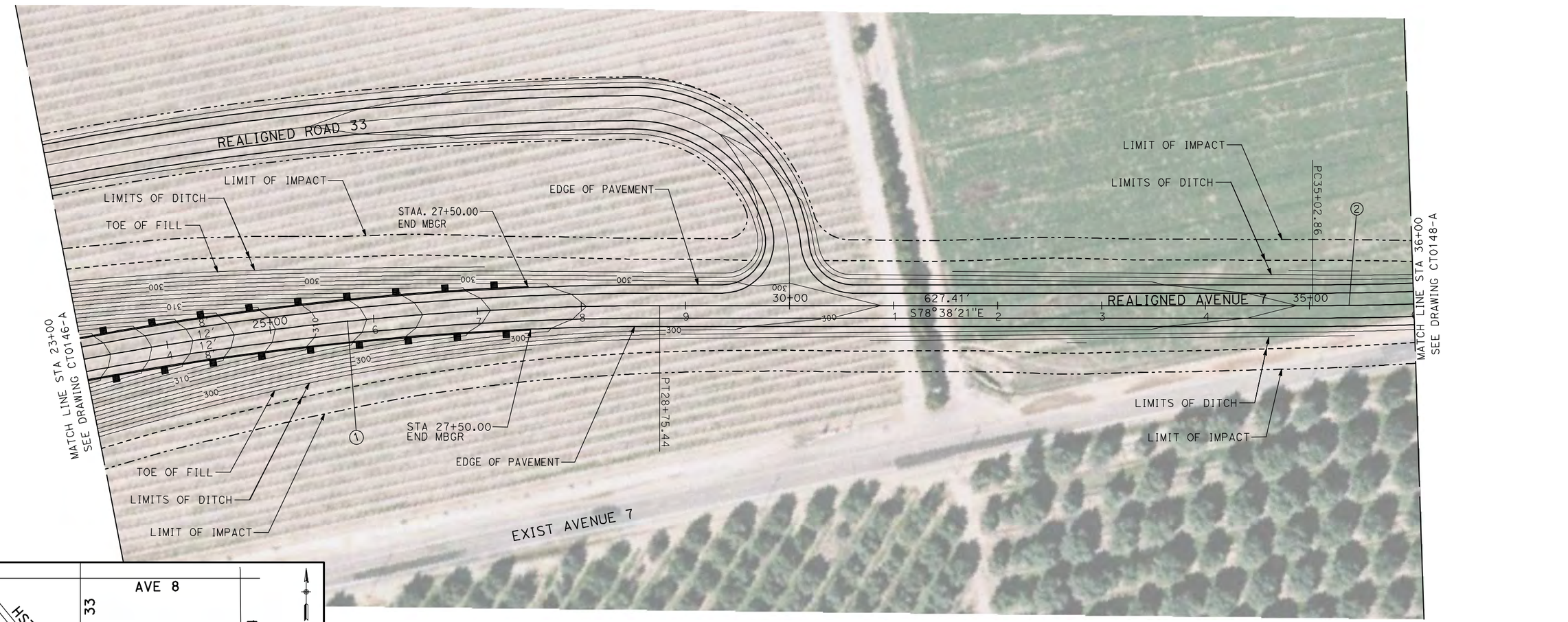
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 7
LAYOUT
SHEET 1 OF 3

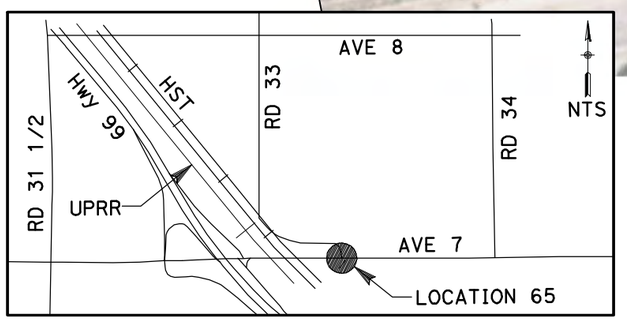
CONTRACT NO. HST06-007
DRAWING NO. CT0146-A
SCALE AS SHOWN
SHEET NO. OF ###

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CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |
| ② | 3000.00′ | 12°10′29" | 319.93′ | 637.46′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1146-A THROUGH CT1148-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**
**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 7
LAYOUT
SHEET 2 OF 3

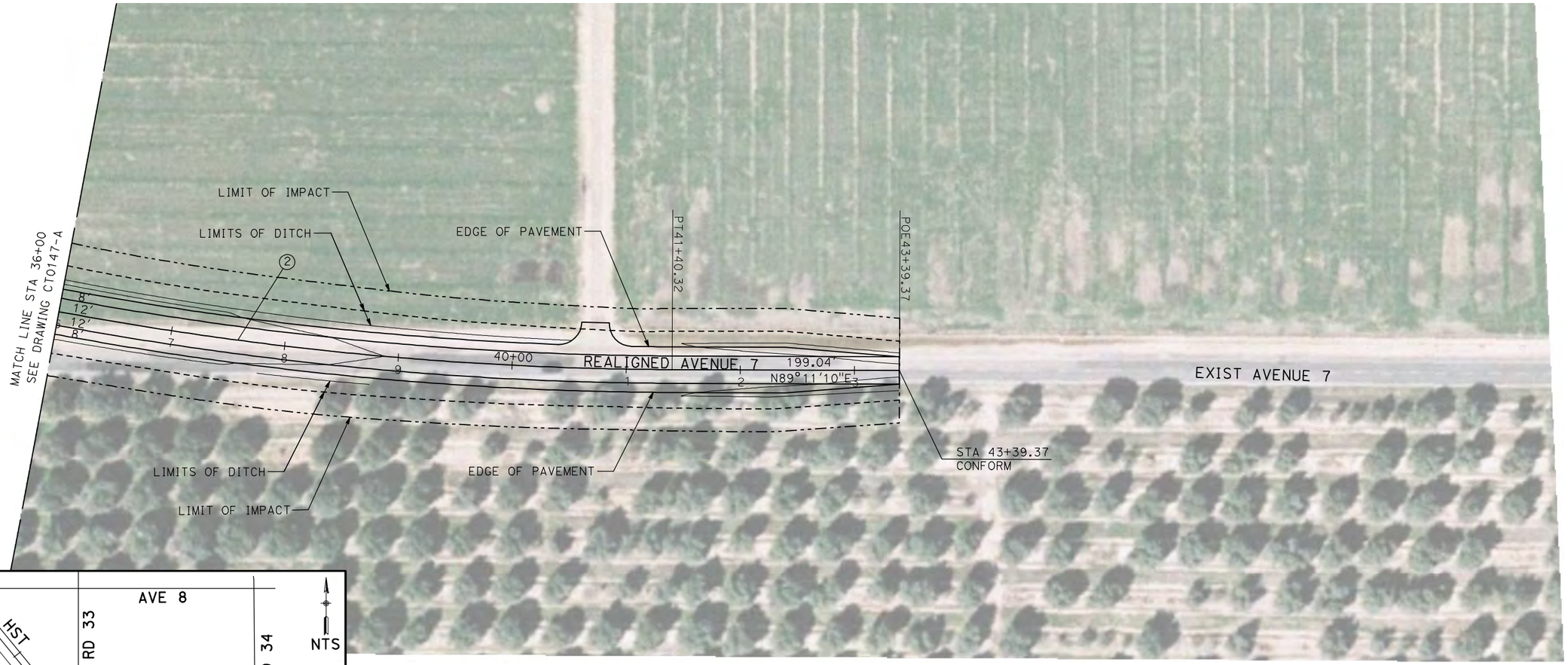
CONTRACT NO. HST06-007
DRAWING NO. CT0147-A
SCALE AS SHOWN
SHEET NO. OF ###

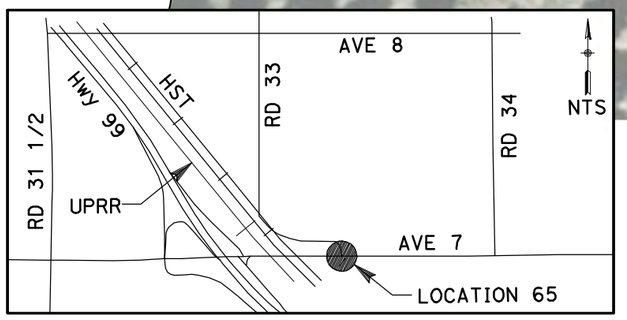
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GibsonR1

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4/29/2011 2:07:46 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00′ | 6°52′32" | 300.36′ | 600.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1146-A THROUGH CT1148-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
CH2MHILL

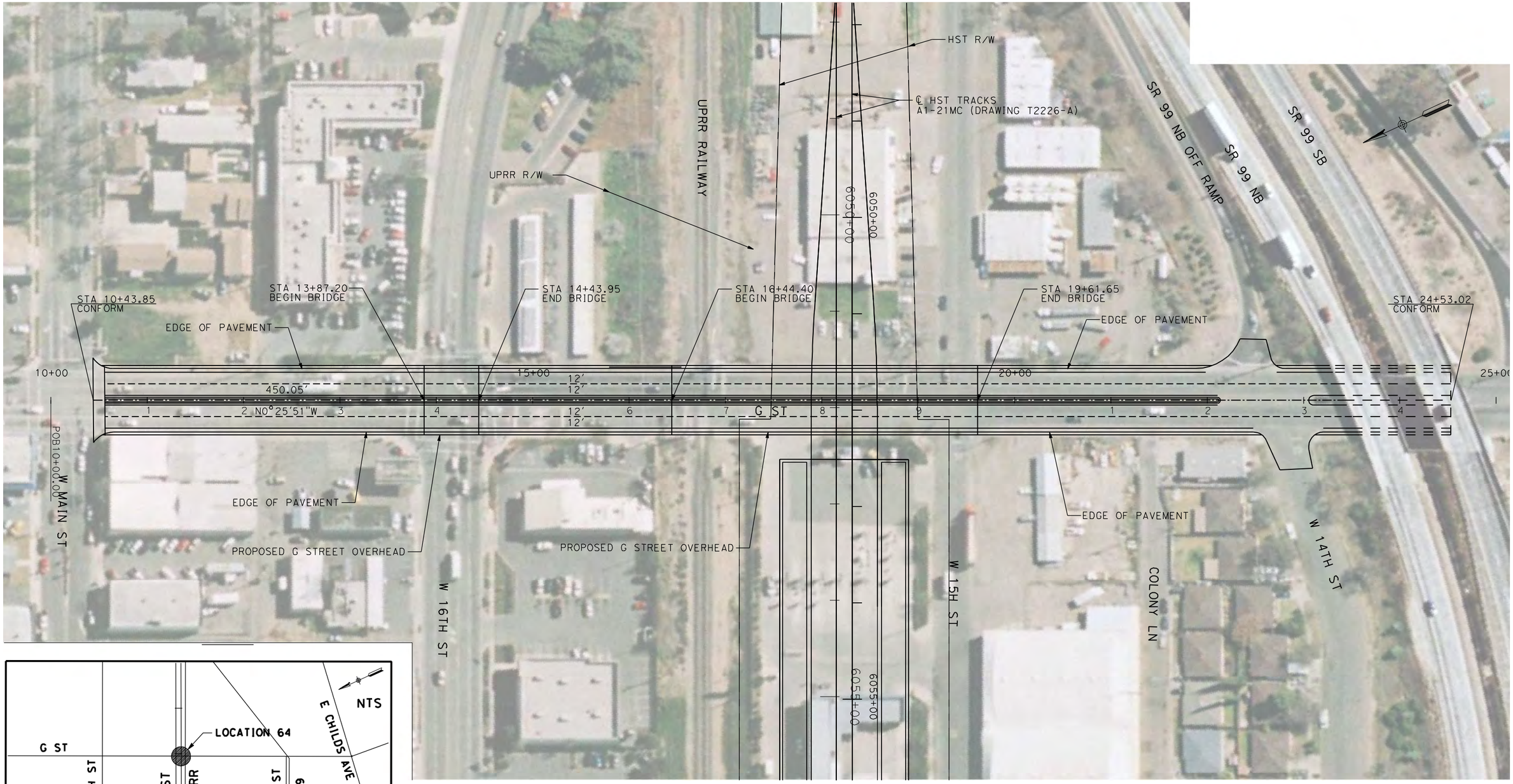
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 7
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0148-A
SCALE AS SHOWN
SHEET NO. OF ###

GibsonR1 1/10/2012 3:54:57 PM i:\cnsr\60022962\task-03_merced-fresno\cadd\civil\design\gibsonr\rev 1 - 15% plans\cadd\sheet\plans\a1 MF-CT-0149-A_REV1.dgn







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWING CT1149-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

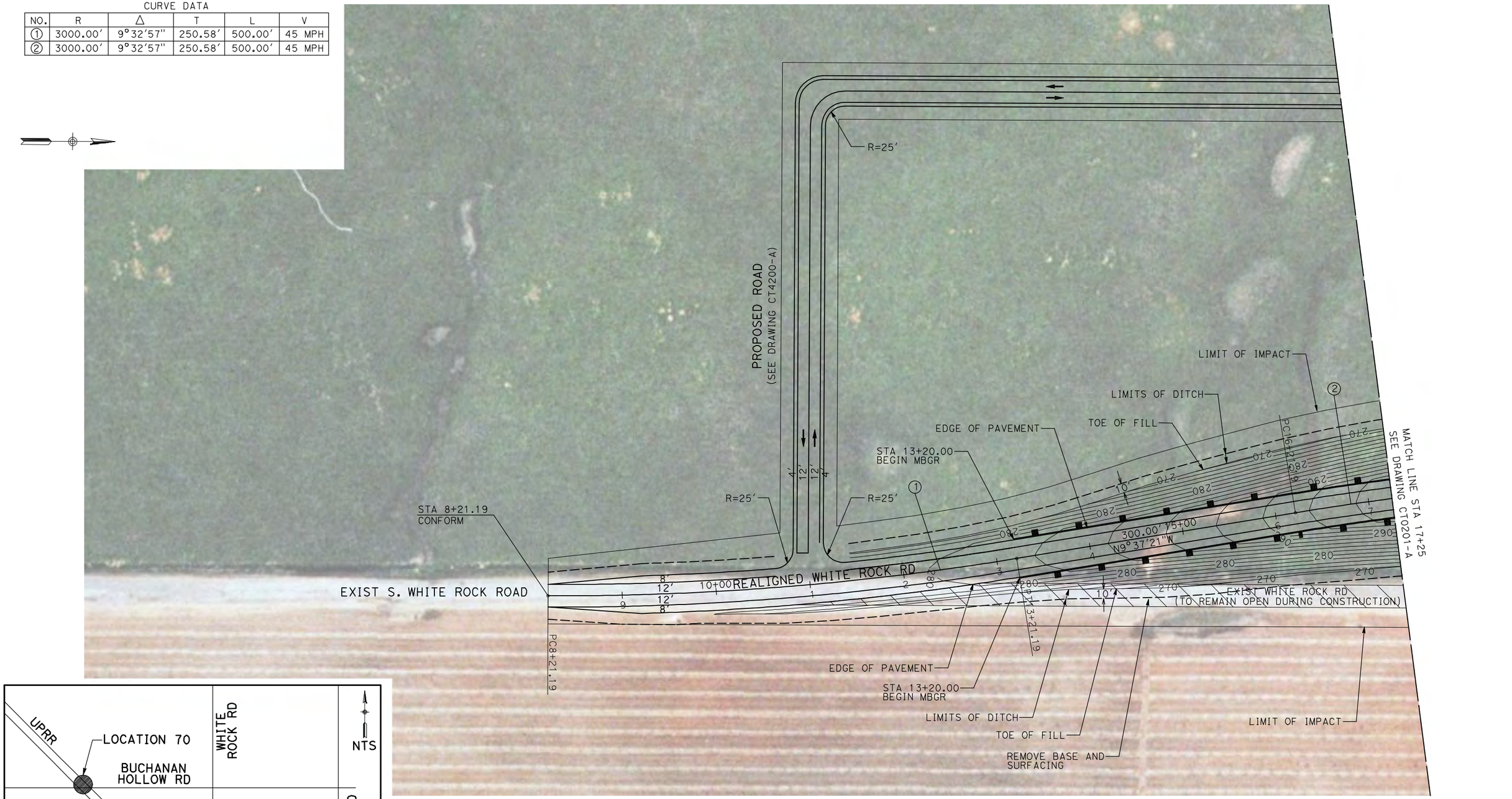
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTOR - AVE 21 WYE
GRADE SEPARATION - G STREET
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CT0149-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1200-A THROUGH CT1202-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. WHITE ROCK RD
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0200-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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4/29/2011 2:37:28 PM GibsonR1

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CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |

PROPOSED ROAD
(SEE DRAWING CT4200-A)

4′ 12′ 12′ 4′

BUCHANON HOLLLOW RD

STA 23+51.86
END MBGR

STA 23+51.86
BEGIN BRIDGE

LIMITS OF DITCH

TOE OF FILL

EDGE OF PAVEMENT

℄ HST TRACKS
A1-21MC-01
(DRAWING T1502-A)

HST R/W

STA 25+99.08
BEGIN MBGR

LIMIT OF IMPACT

LIMITS OF DITCH

TOE OF FILL

EDGE OF PAVEMENT

MATCH LINE STA 17+25
SEE DRAWING CT0200-A

20+00

12′ REALIGNED WHITE ROCK RD

25+00

300.05′
N0°04′24"W

30+00

MATCH LINE STA 31+25
SEE DRAWING CT0202-A

EDGE OF PAVEMENT

TOE OF FILL

LIMITS OF DITCH

REMOVE BASE AND
SURFACING

EXIST WHITE ROCK ROAD
(TO REMAIN OPEN DURING CONSTRUCTION)

STA 25+99.08
END BRIDGE

TOE OF FILL

EDGE OF PAVEMENT

LIMITS OF DITCH

LIMIT OF IMPACT

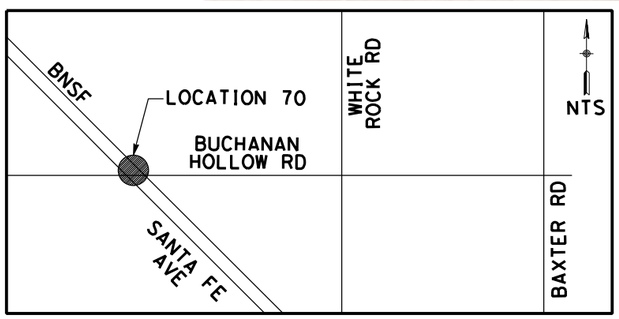
STA 23+51.86
END MBGR

PROPOSED WHITE ROCK RD
OVERHEAD

HST STA 643+36.83=
STA 24+51.16

645+00

640+00




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1200-A THROUGH CT1202-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

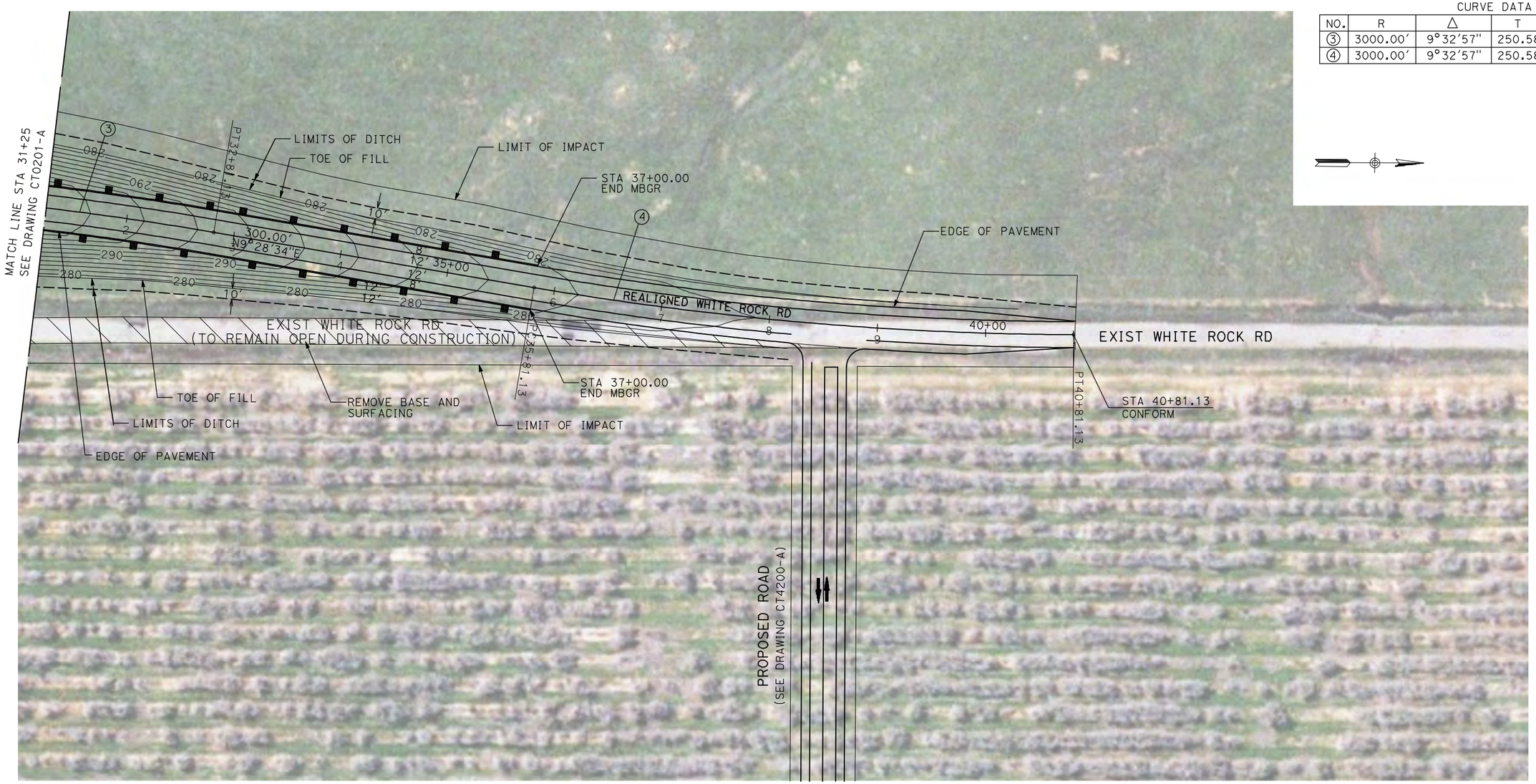
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. WHITE ROCK RD
LAYOUT
SHEET 2 OF 3

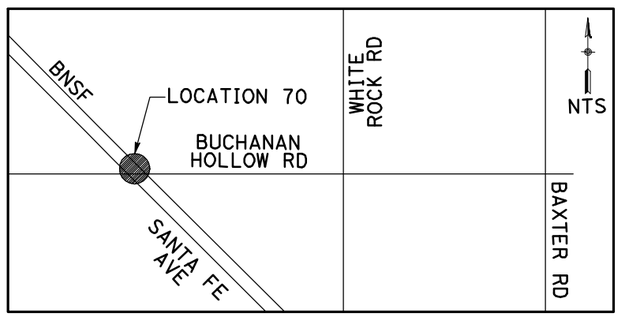
CONTRACT NO. HST06-007
DRAWING NO. CT0201-A
SCALE AS SHOWN
SHEET NO. ### OF ###

4/3/2012 11:21:22 AM DeMarcoF

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1200-A THROUGH CT1202-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

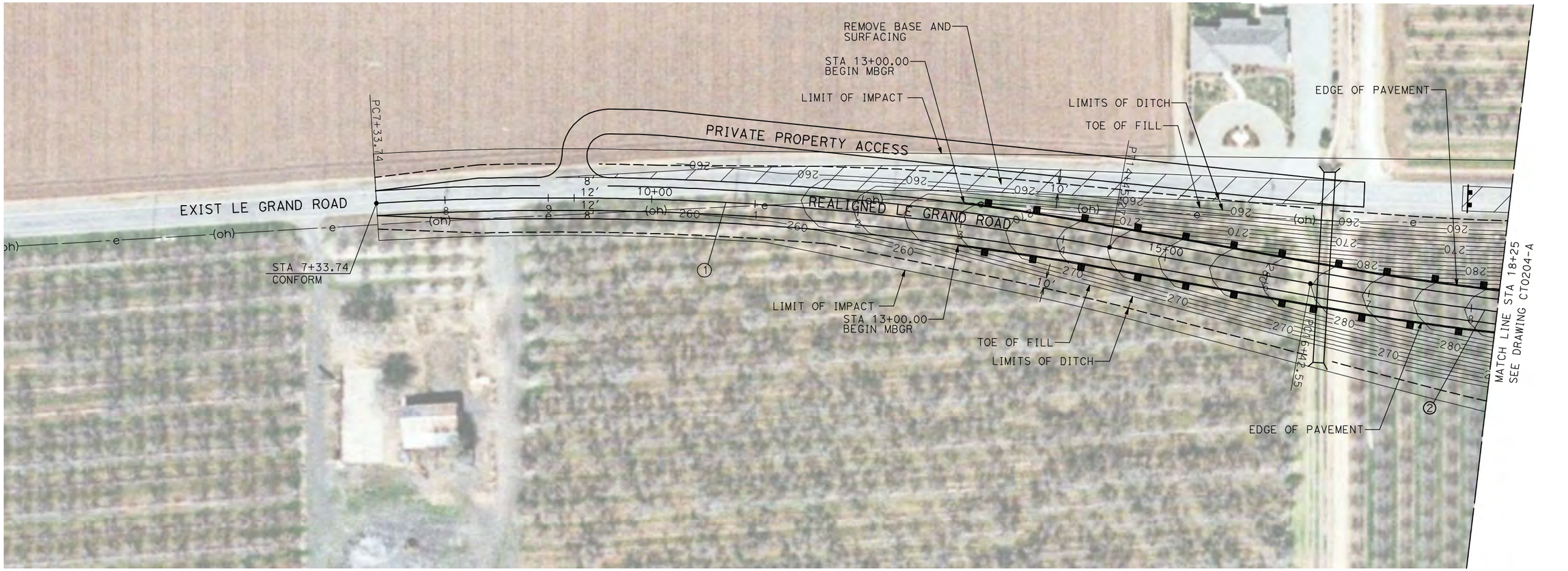
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. WHITE ROCK RD
LAYOUT
SHEET 3 OF 3

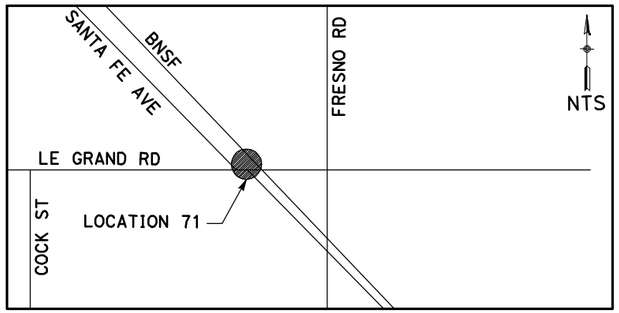
CONTRACT NO. HST06-007
DRAWING NO. CT0202-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1203-A THROUGH CT1205-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
LAYOUT
SHEET 1 OF 3

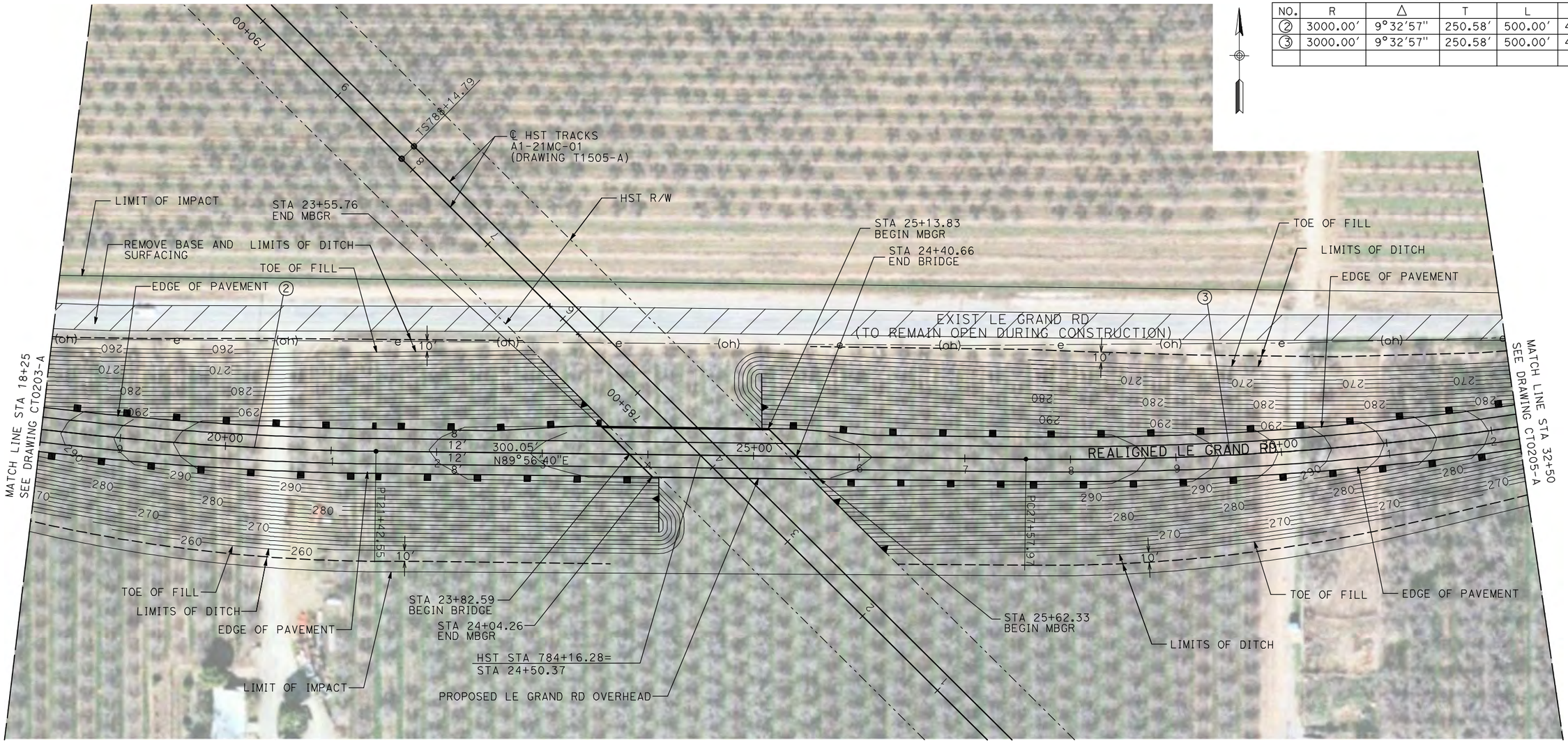
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DRAWING NO. CT0203-A
SCALE AS SHOWN
SHEET NO. ### OF ###

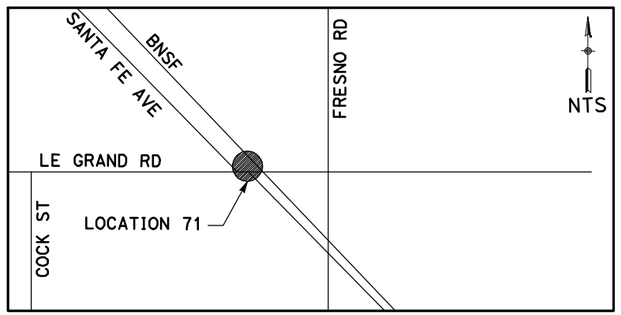
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GibsonR1

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1203-A THROUGH CT1205-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

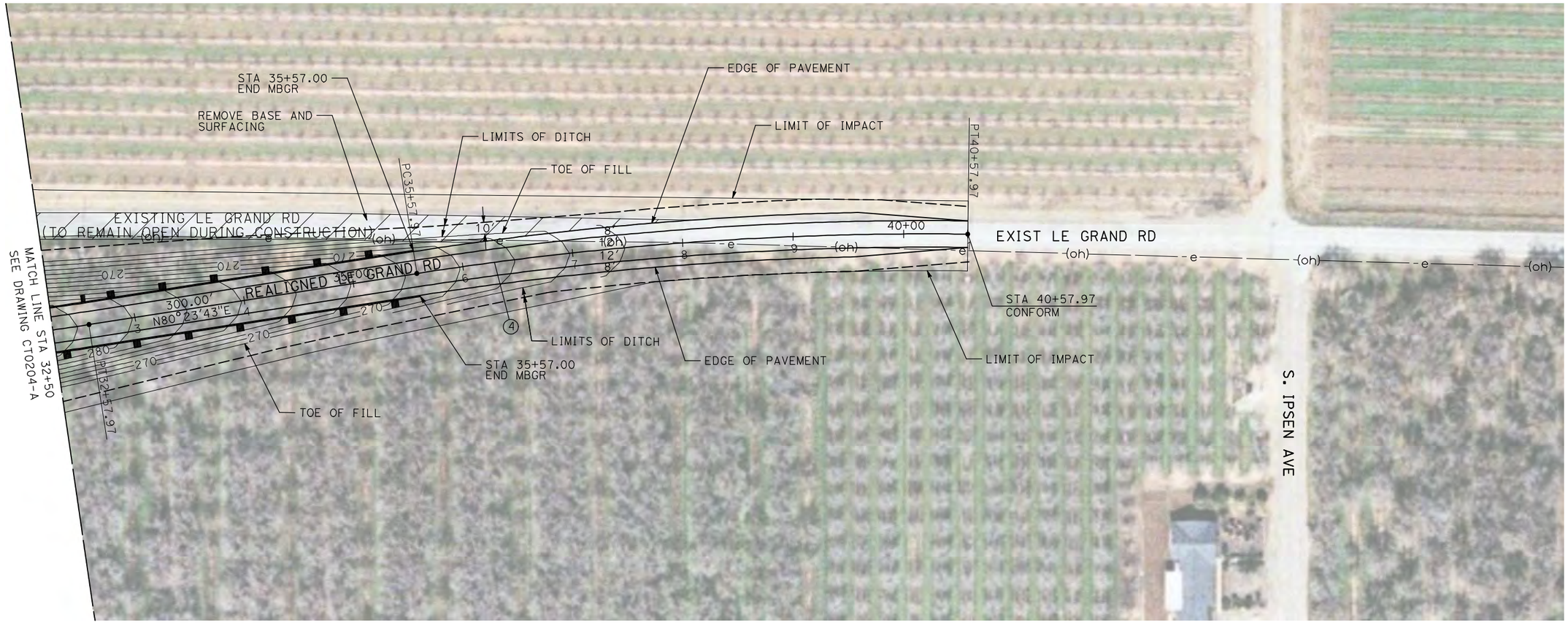
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
LAYOUT
SHEET 2 OF 3

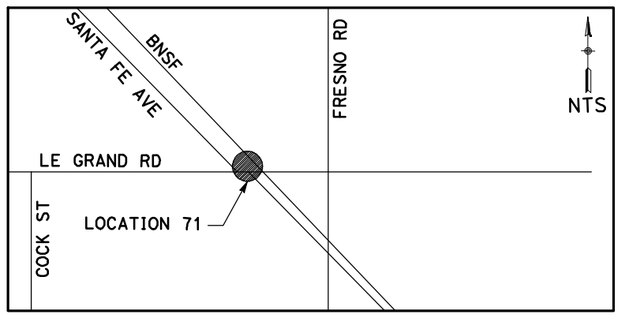
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DRAWING NO. CT0204-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1203-A THROUGH CT1205-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

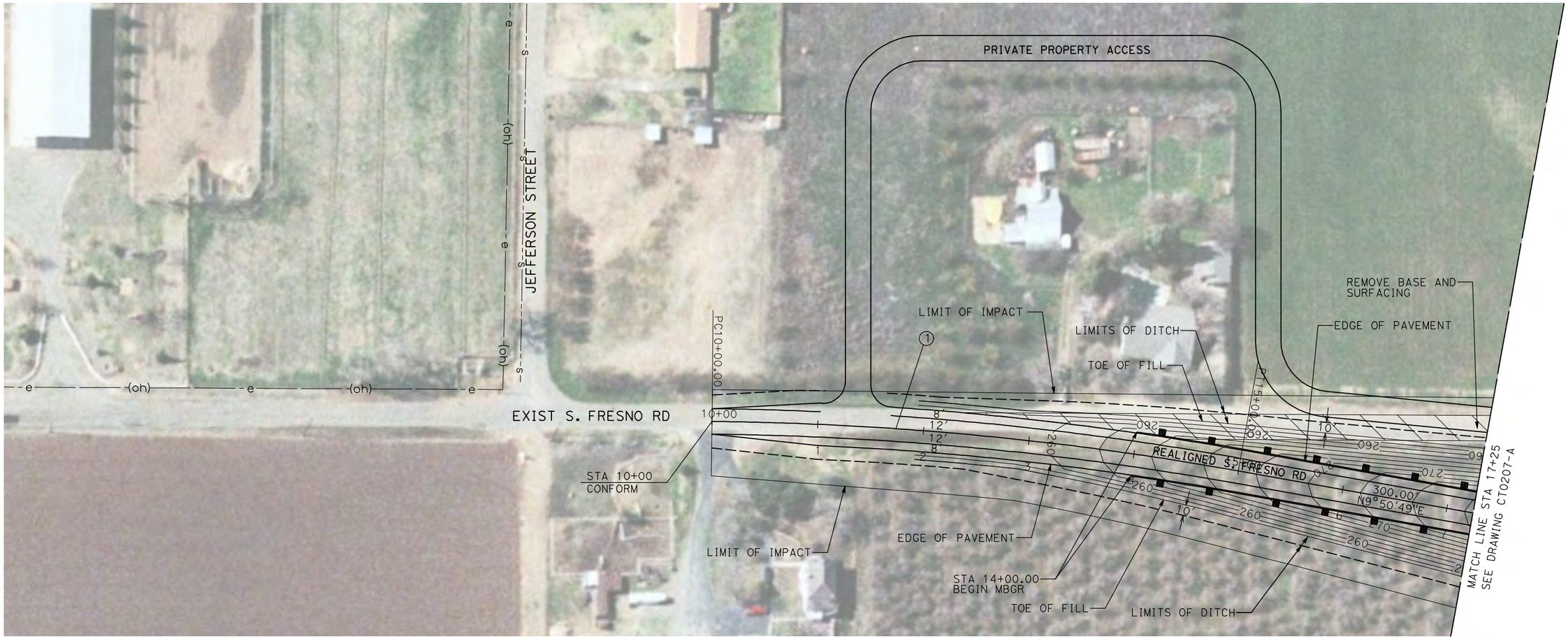
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
LAYOUT
SHEET 3 OF 3

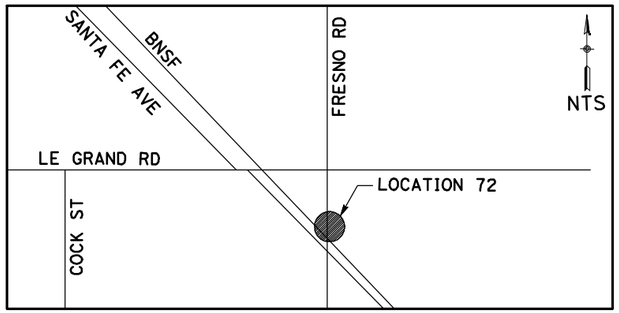
CONTRACT NO. HST06-007
DRAWING NO. CT0205-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:38:04 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1206-A THROUGH CT1208-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

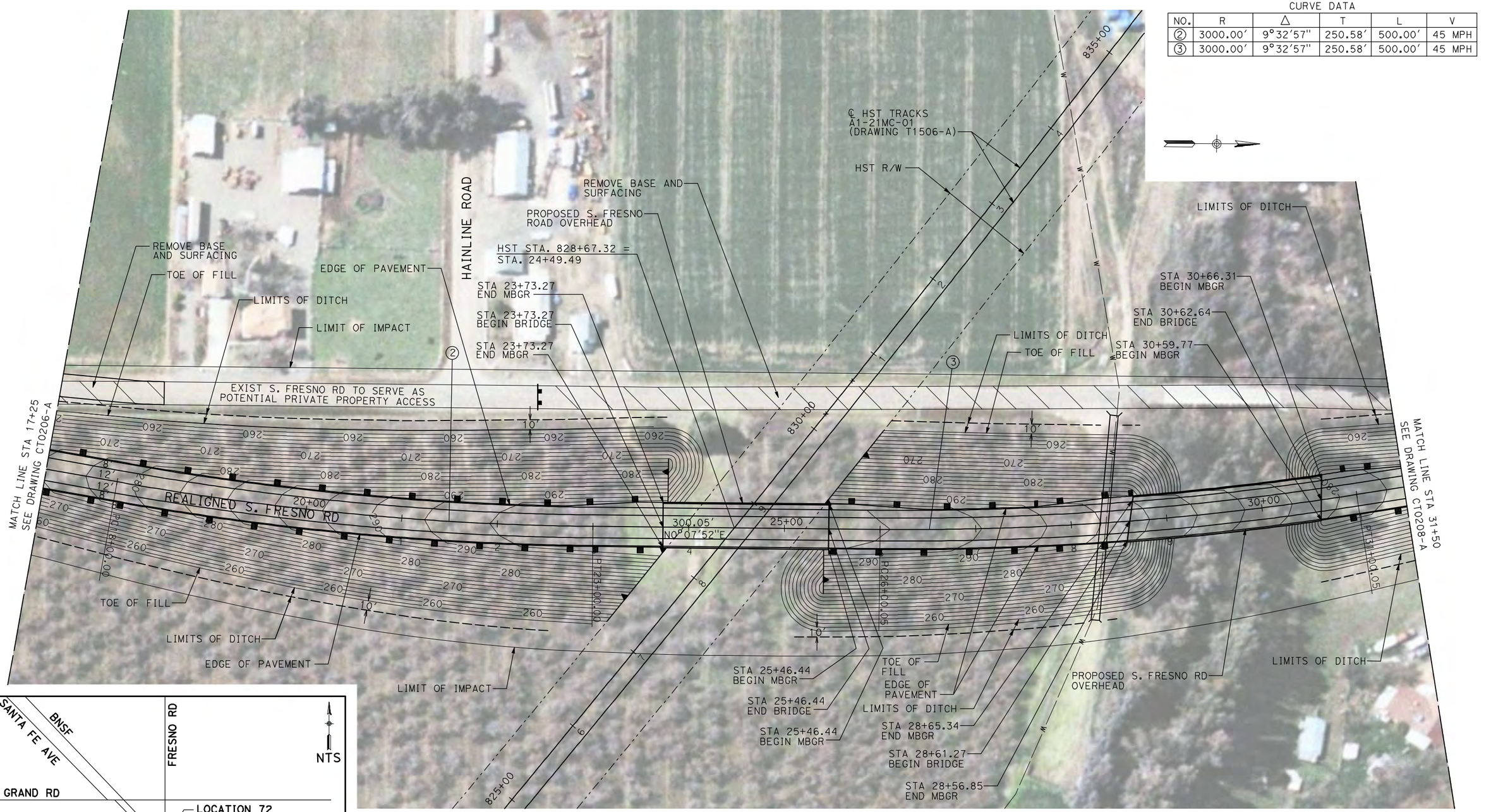
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0206-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1206-A THROUGH CT1208-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

| | |
|---|---|
| DESIGNED BY | R. GIBSON |
| DRAWN BY | H. PHAN |
| CHECKED BY | J. ZANDIAN |
| IN CHARGE | A. BOONE |
| DATE | 04/29/2011 |

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**


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Technical Services, Inc.
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Sacramento, CA 95811
CH2MHILL


CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

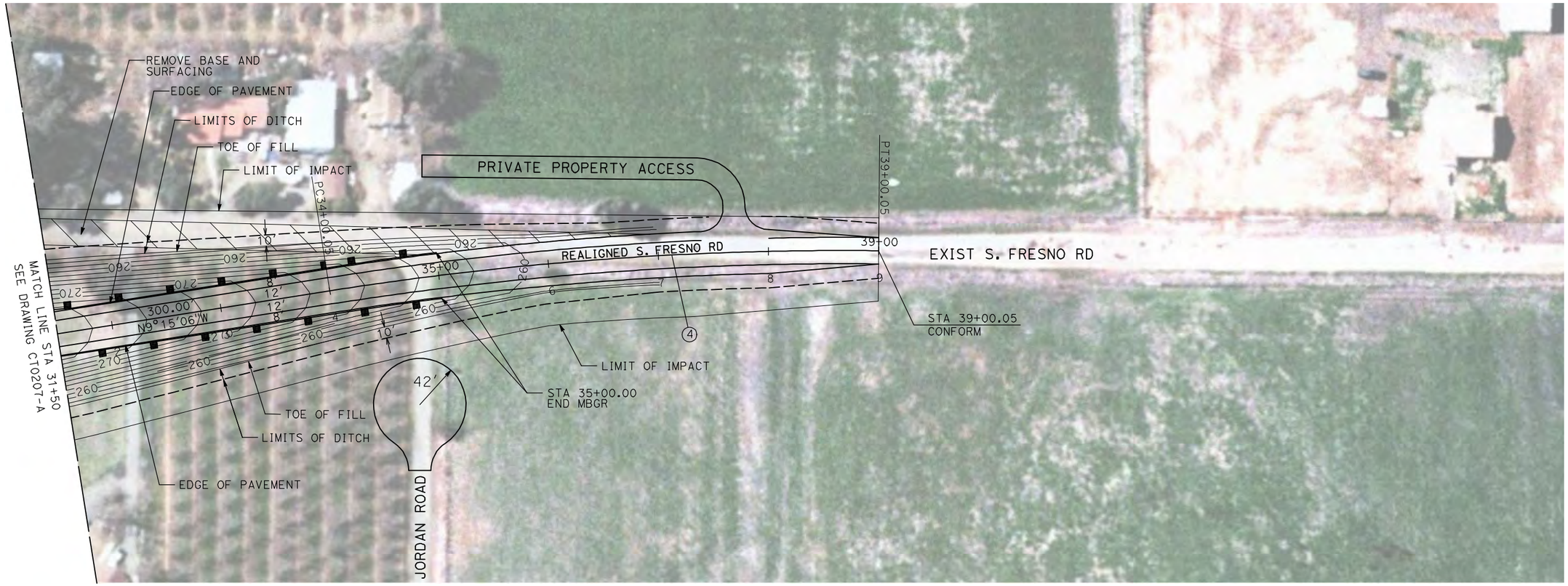
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
LAYOUT
SHEET 2 OF 3

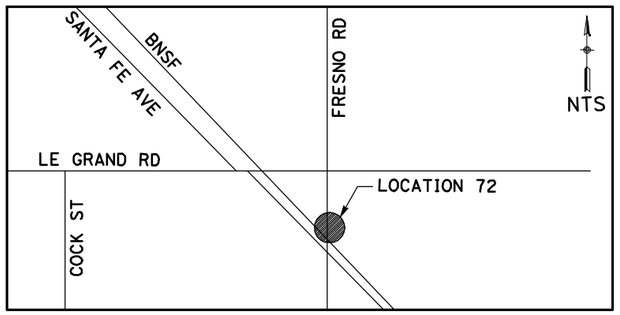
| | |
|---|---|
| CONTRACT NO. | HST06-007 |
| DRAWING NO. | CT0207-A |
| SCALE | AS SHOWN |
| SHEET NO. | ### OF ### |


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4/29/2011 2:38:11 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1206-A THROUGH CT1208-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

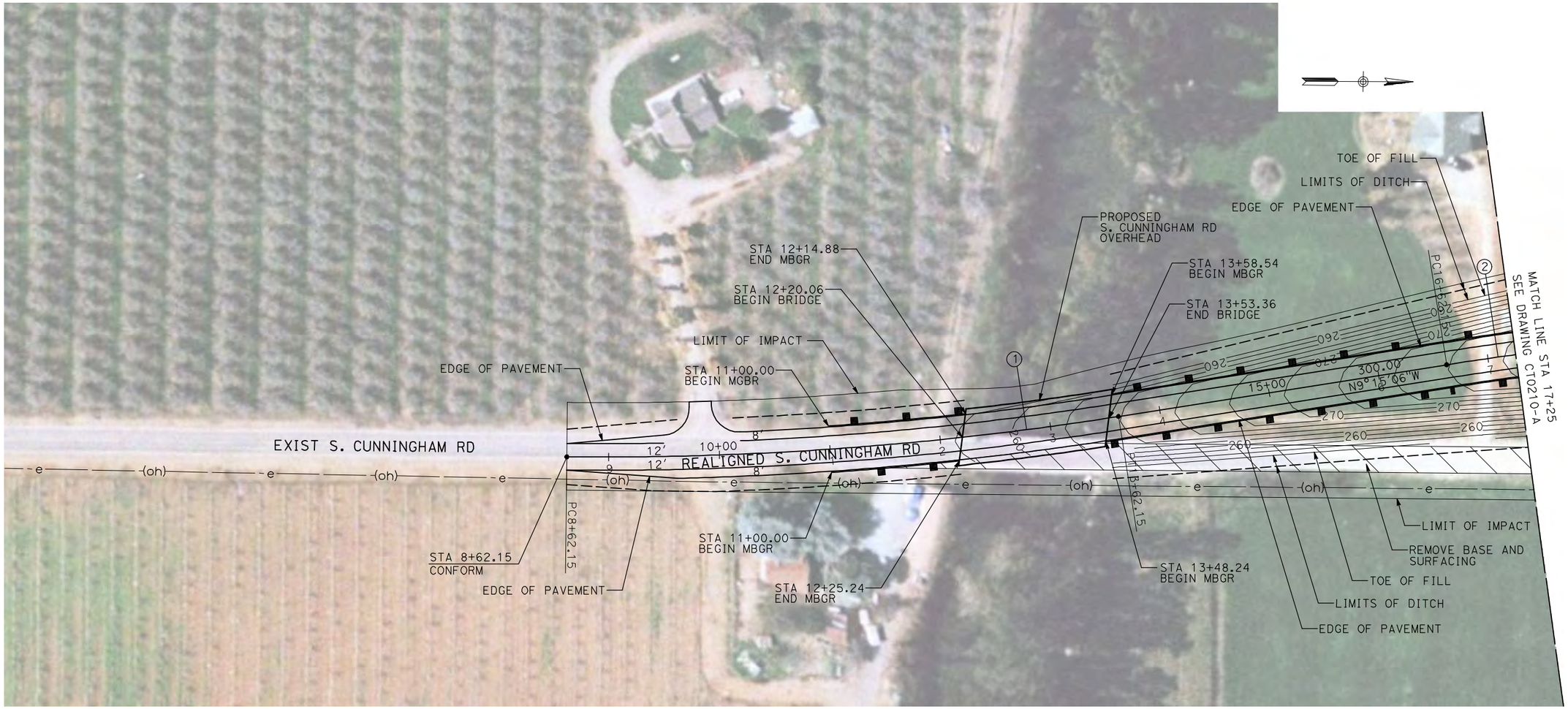
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
LAYOUT
SHEET 3 OF 3

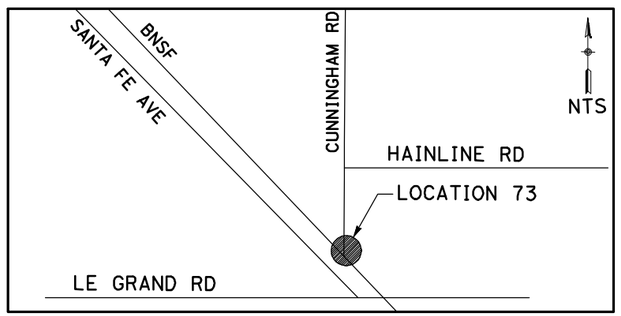
CONTRACT NO. HST06-007
DRAWING NO. CT0208-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:38:19 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1209-A THROUGH CT1211-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. CUNNINGHAM RD
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0209-A
SCALE AS SHOWN
SHEET NO. ### OF ###

4/29/2011 2:38:26 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\A1-Ave2124MC01\Volume 1A - Ave 2124 Wye Grade Separation\Layout\WF-CT-0209-A.dgn
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |

PROPOSED S. CUNNINGHAM RD OVERHEAD

HST STA 863+98.41= STA 24+49.75

HST R/W

℄ HST TRACKS A1-21MC-01 (DRAWING T1506-A)

STA 23+49.25 END MBGR

STA 23+33.52 BEGIN BRIDGE

STA 23+20.79 END MBGR

EDGE OF PAVEMENT

LIMITS OF DITCH

TOE OF FILL

STA 25+80.95 BEGIN MBGR

LIMIT OF IMPACT

LIMITS OF DITCH

TOE OF FILL

EDGE OF PAVEMENT

MATCH LINE STA 17+25 SEE DRAWING CT0209-A

REALIGNED S. CUNNINGHAM RD

20+00

25+00

30+00

865+00

300.05′ N0°07′52"E

EXIST S. CUNNINGHAM ROAD (TO REMAIN OPEN DURING CONSTRUCTION)

MATCH LINE STA 31+50 SEE DRAWING CT0211-A

EDGE OF PAVEMENT

TOE OF FILL

LIMIT OF IMPACT

LIMITS OF DITCH

REMOVE BASE AND SURFACING

STA 25+65.34 END BRIDGE

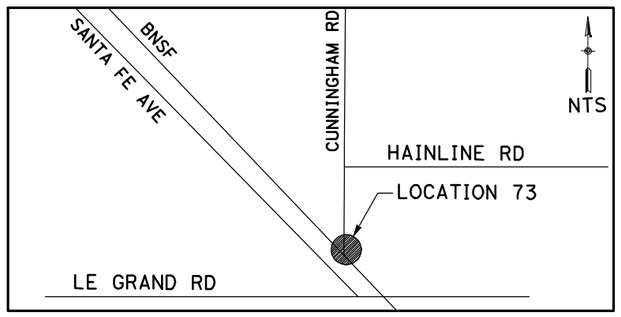
STA 25+52.70 BEGIN MBGR

REMOVE BASE AND SURFACING

LIMITS OF DITCH

TOE OF FILL

EDGE OF PAVEMENT




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1209-A THROUGH CT1211-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE GRADE SEPARATION - S. CUNNINGHAM RD
LAYOUT
SHEET 2 OF 3

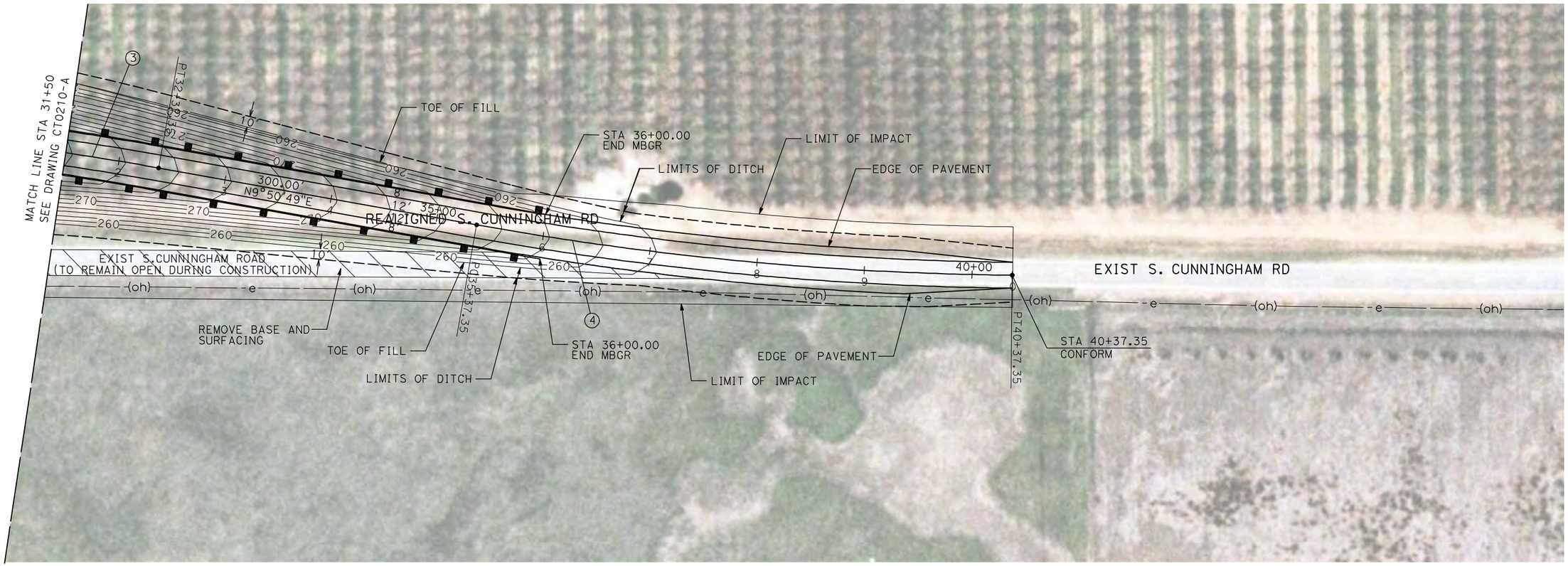
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DRAWING NO. CT0210-A
SCALE AS SHOWN
SHEET NO. ### OF ###

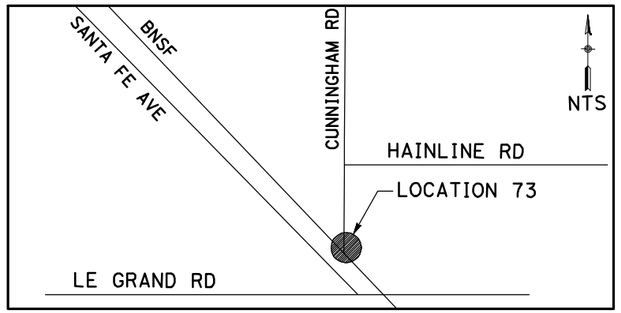
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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1209-A THROUGH CT1211-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. CUNNINGHAM RD
LAYOUT
SHEET 3 OF 3

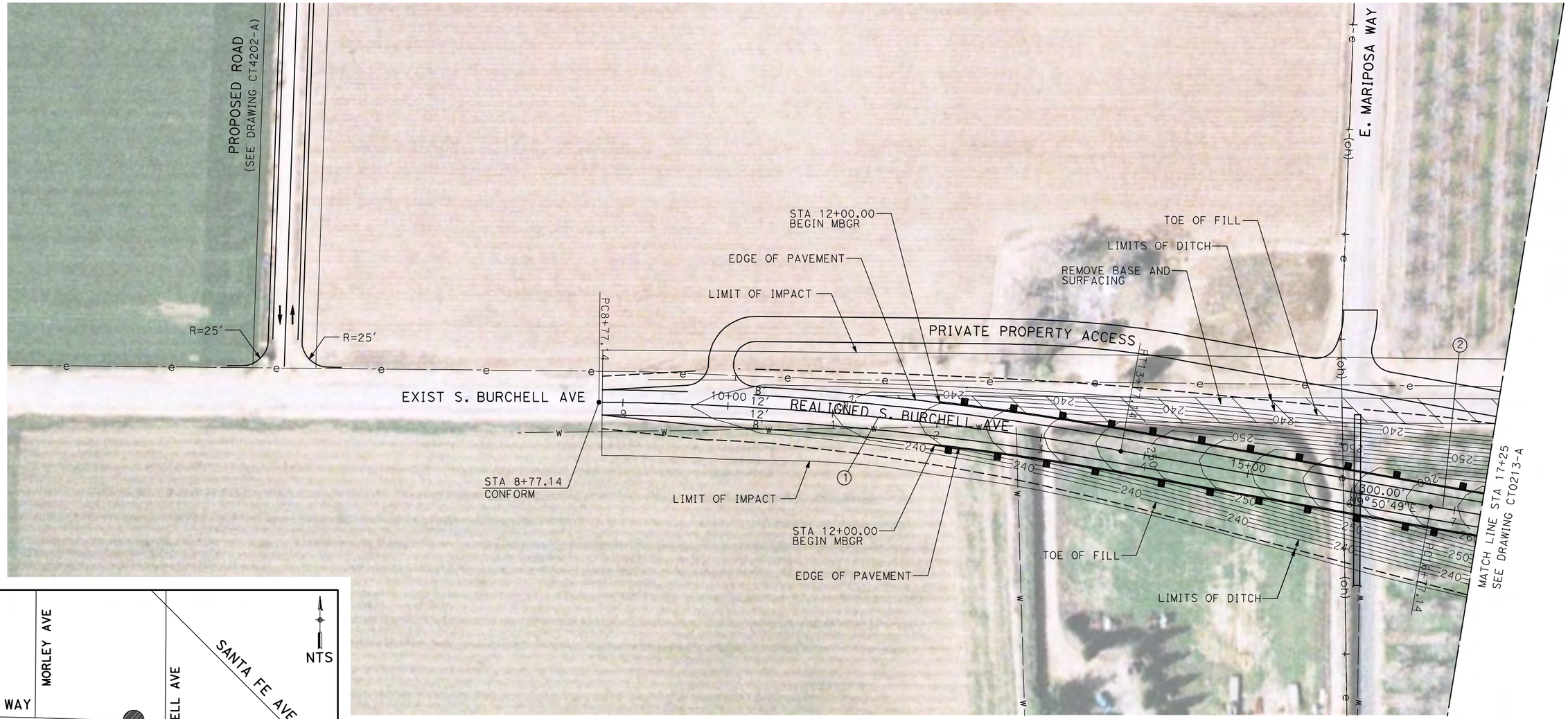
CONTRACT NO. HST06-007
DRAWING NO. CT0211-A
SCALE AS SHOWN
SHEET NO. ### OF ###

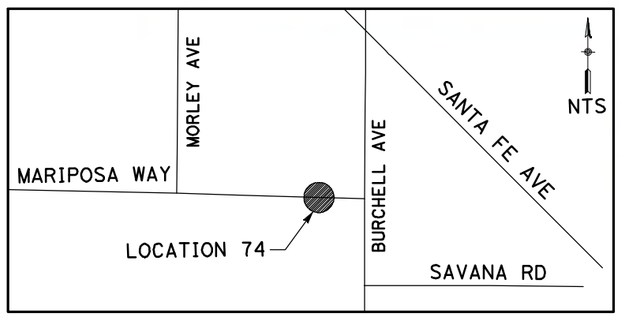
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GibsonR1

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1212-A THROUGH CT1214-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

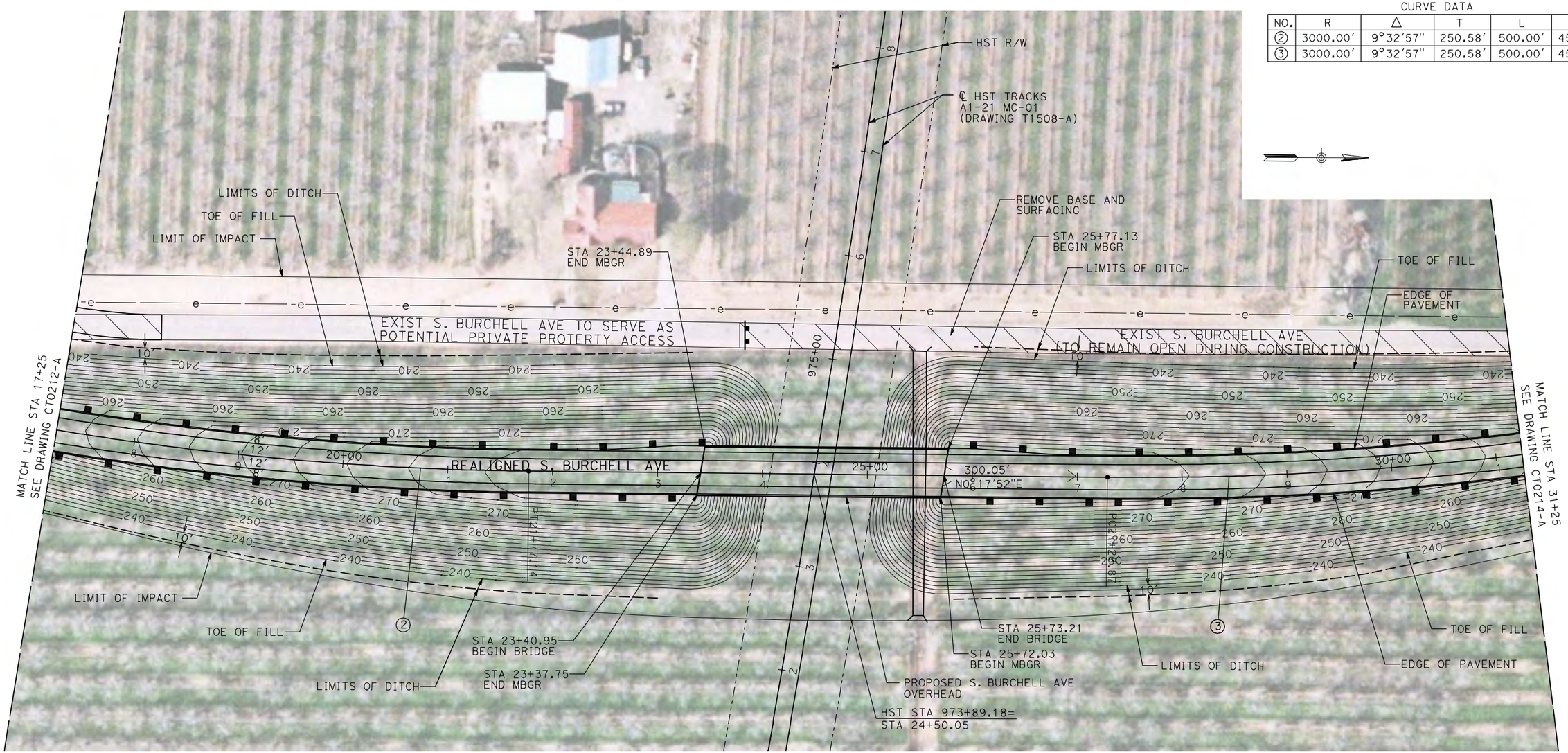
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. BURCHELL AVE
LAYOUT
SHEET 1 OF 3

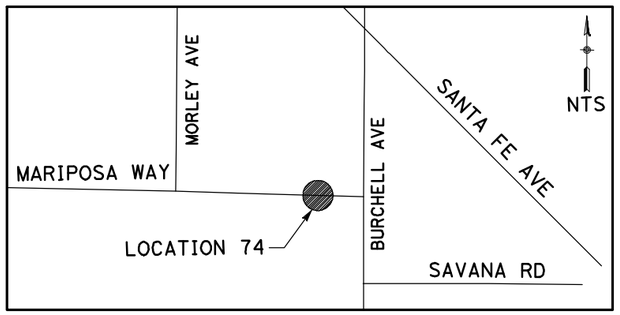
CONTRACT NO. HST06-007
DRAWING NO. CT0212-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:38:56 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1212-A THROUGH CT1214-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

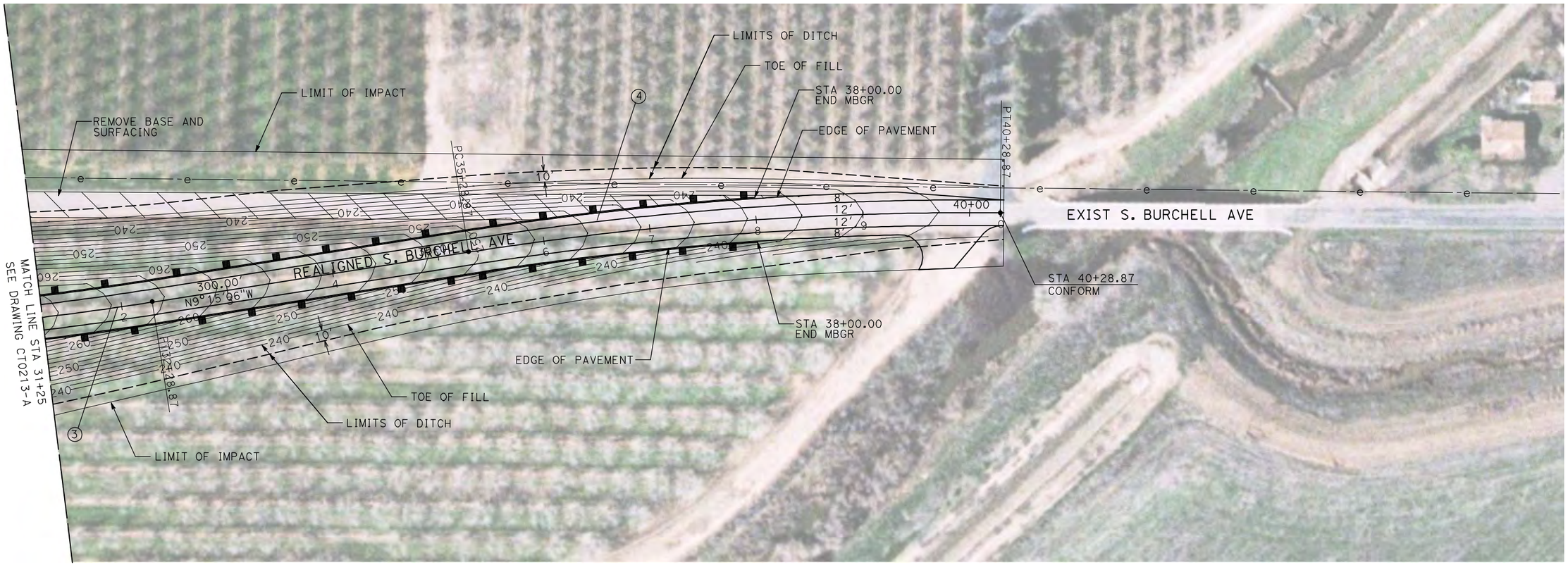
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# MERCED TO FRESNO

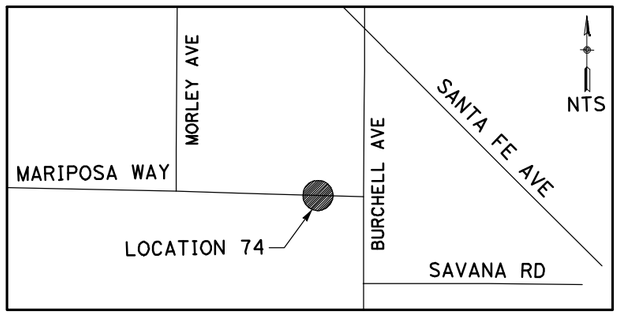
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. BURCHELL AVE
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0213-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1212-A THROUGH CT1214-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

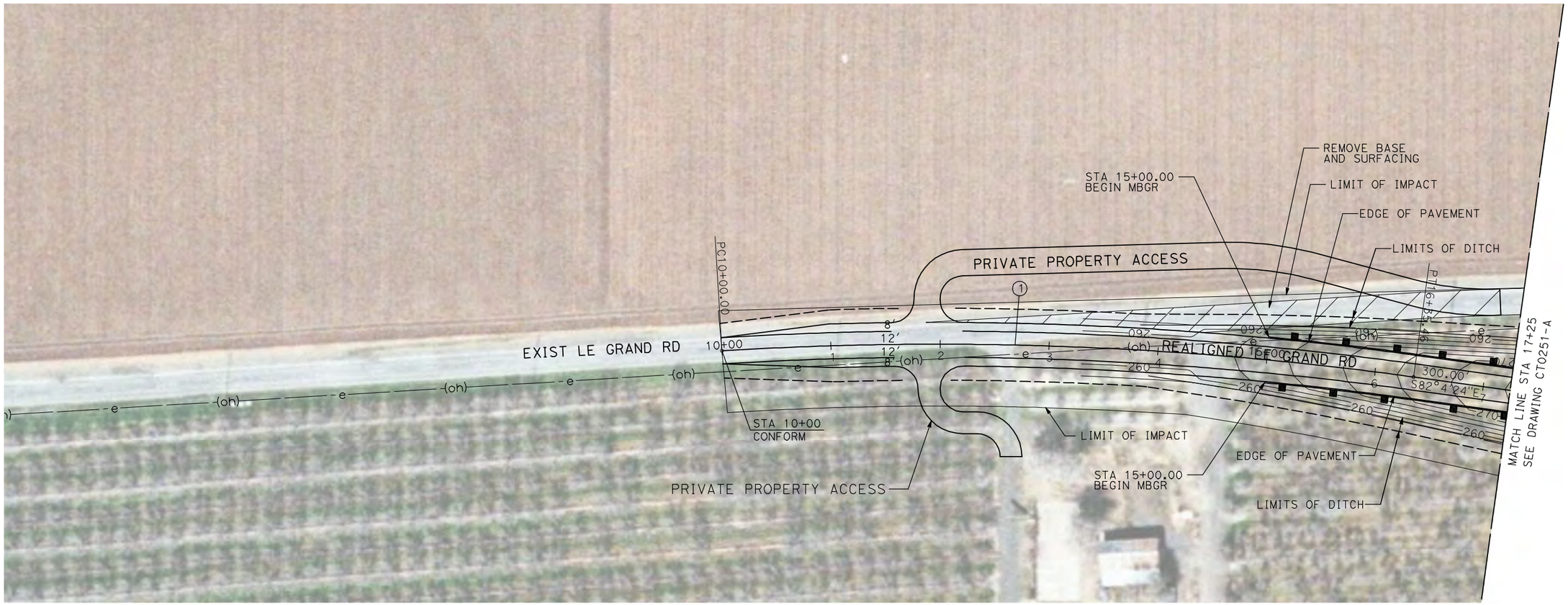
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. BURCHELL AVE
LAYOUT
SHEET 3 OF 3

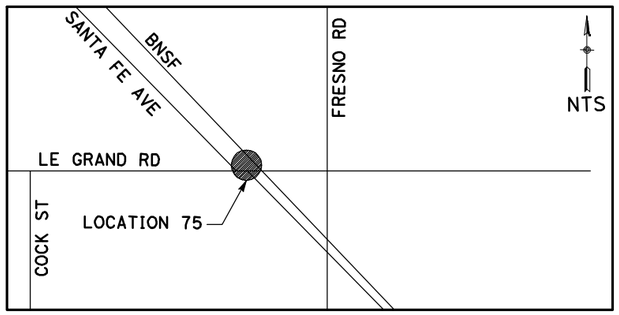
CONTRACT NO. HST06-007
DRAWING NO. CT0214-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3200.00′ | 11°22′41" | 318.78′ | 635.46′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1250-A THROUGH CT1252-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

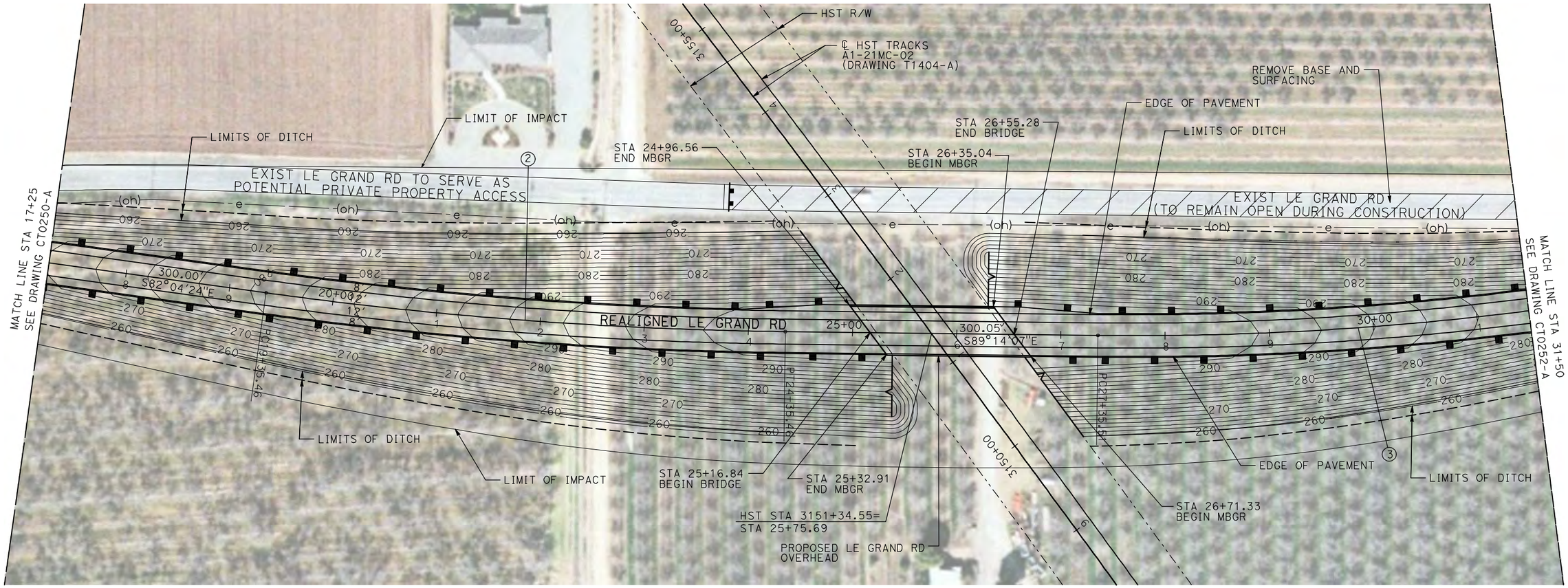
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
LAYOUT
SHEET 1 OF 3

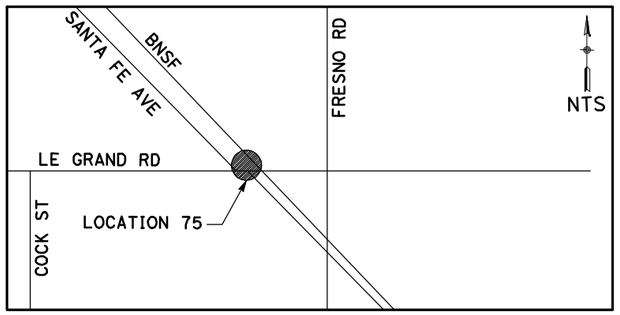
CONTRACT NO. HST06-007
DRAWING NO. CT0250-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 4000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 7°09′43" | 250.33′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1250-A THROUGH CT1252-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
LAYOUT
SHEET 2 OF 3

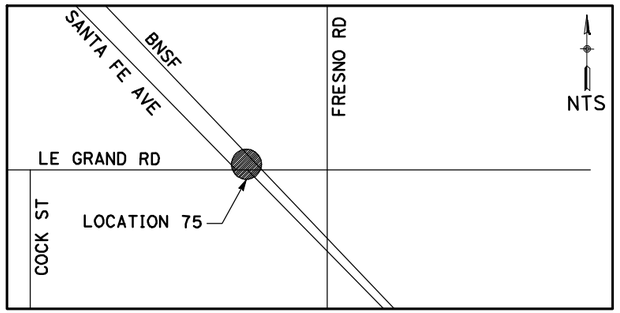
CONTRACT NO. HST06-007
DRAWING NO. CT0251-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1250-A THROUGH CT1252-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0252-A
SCALE AS SHOWN
SHEET NO. ### OF ###

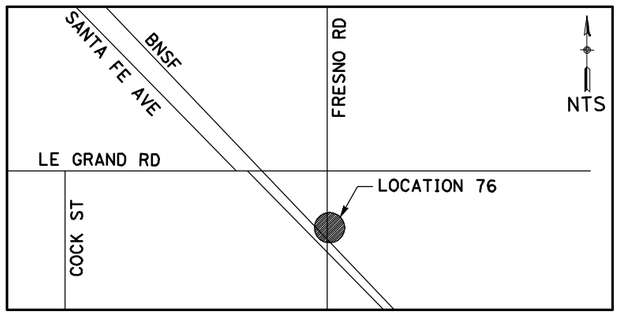
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4/29/2011 2:45:25 PM
GibsonR1

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4/29/2011 2:45:32 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1253-A THROUGH CT1255-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

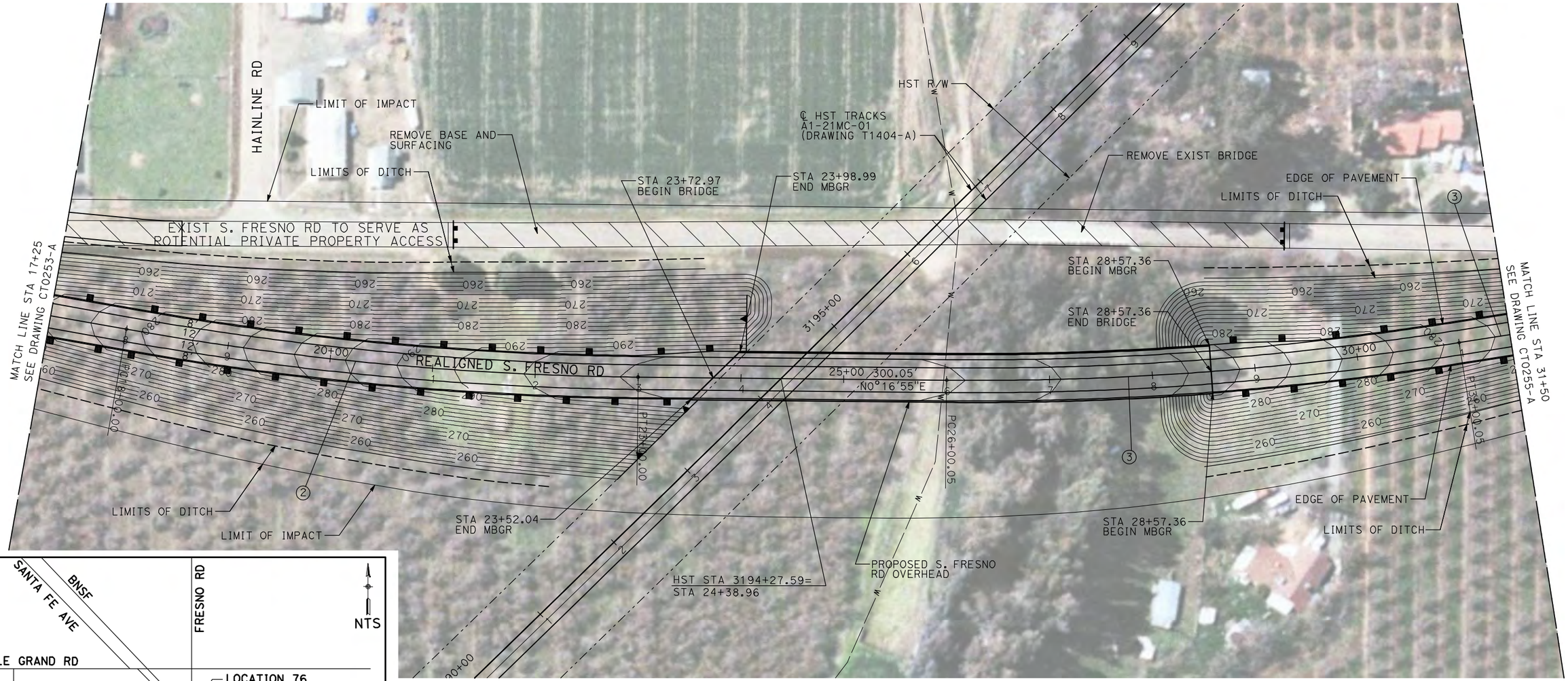
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0253-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1253-A THROUGH CT1255-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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Sacramento, CA 95811
CH2MHILL


CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

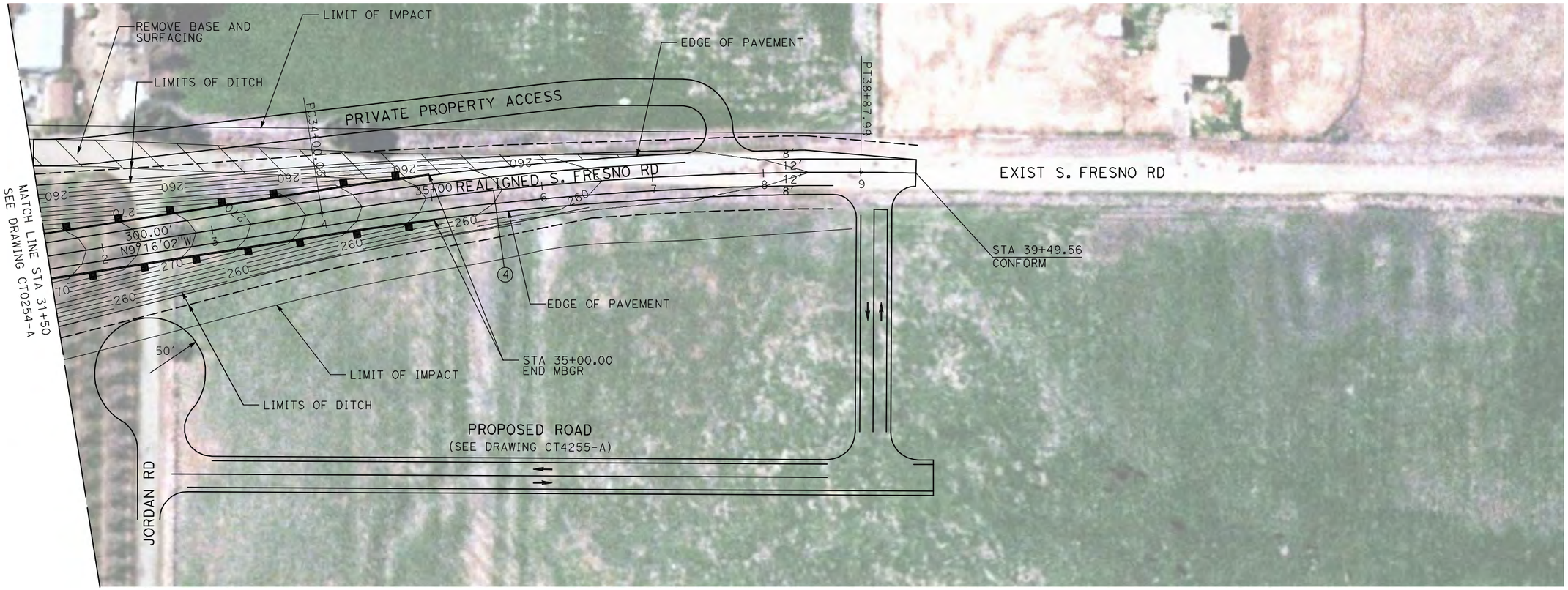
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
LAYOUT
SHEET 2 OF 3

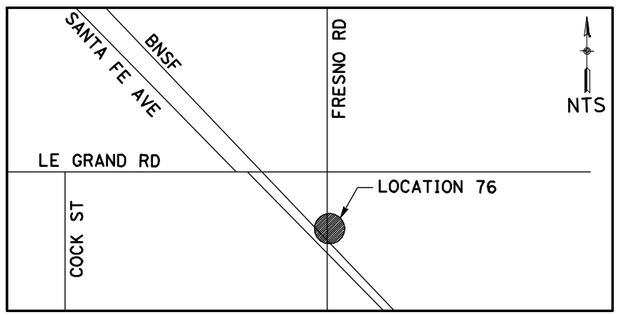
CONTRACT NO. HST06-007
DRAWING NO. CT0254-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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4/29/2011 2:45:39 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°19′08" | 244.51′ | 487.94′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1253-A THROUGH CT1255-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
LAYOUT
SHEET 3 OF 3

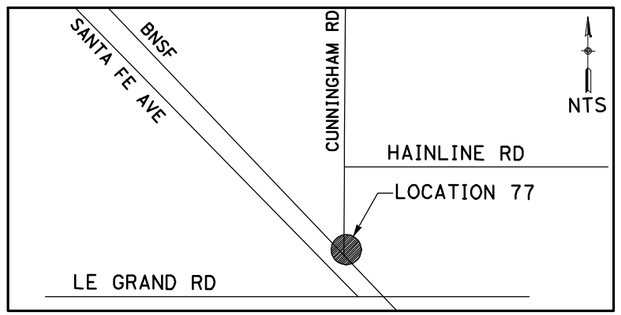
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DRAWING NO. CT0255-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1256-A THROUGH CT1258-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

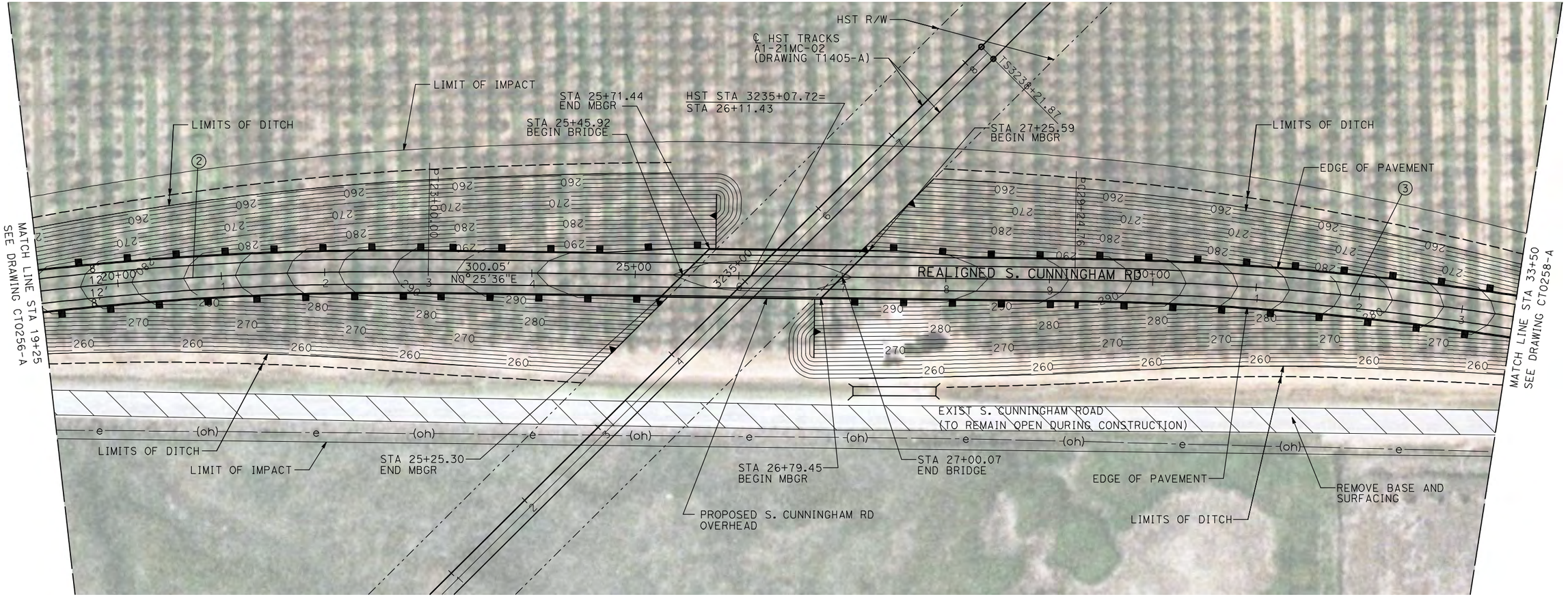
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. CUNNINGHAM RD
LAYOUT
SHEET 1 OF 3

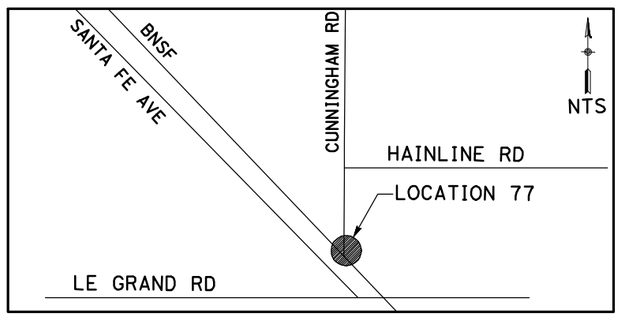
CONTRACT NO. HST06-007
DRAWING NO. CT0256-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1256-A THROUGH CT1258-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

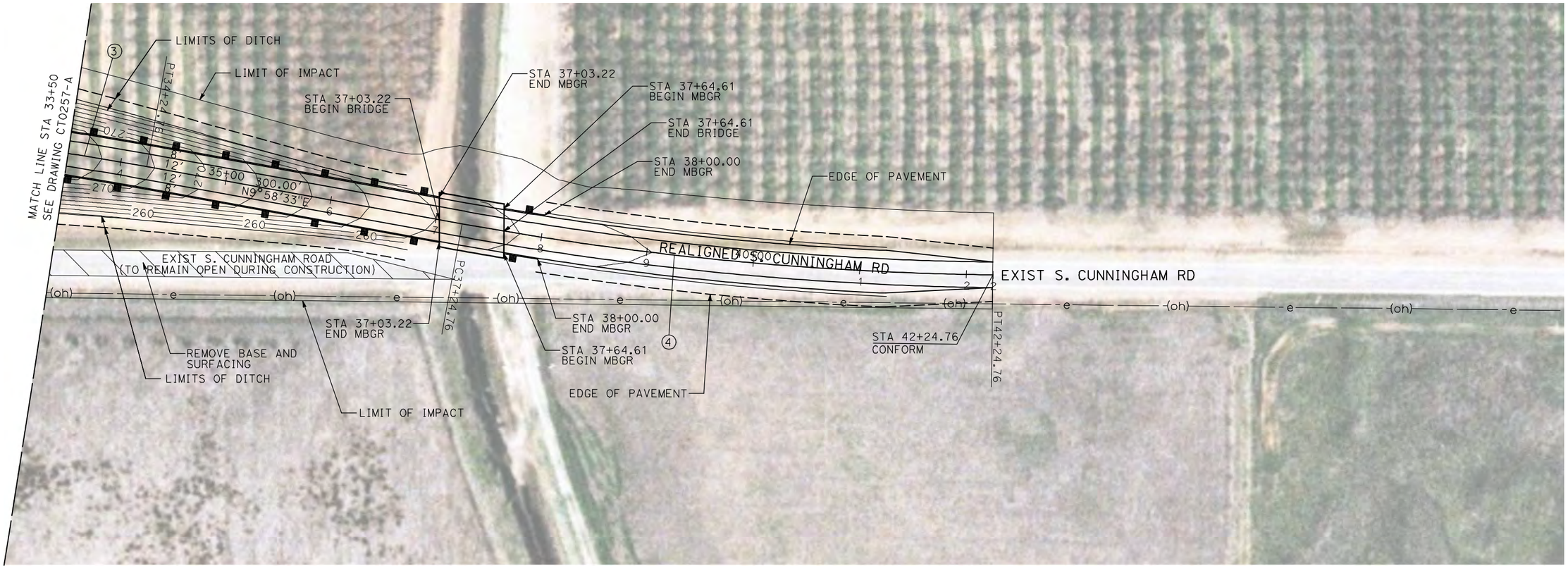
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. CUNNINGHAM RD
LAYOUT
SHEET 2 OF 3

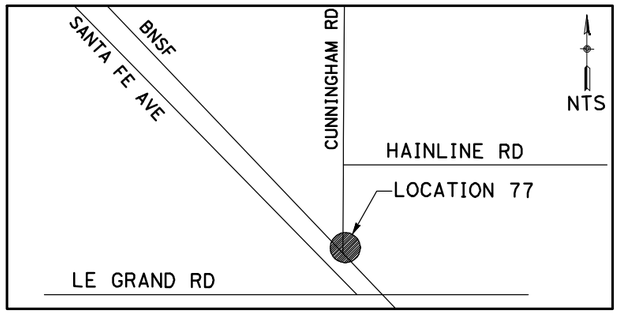
CONTRACT NO. HST06-007
DRAWING NO. CT0257-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1256-A THROUGH CT1258-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. CUNNINGHAM RD
LAYOUT
SHEET 3 OF 3

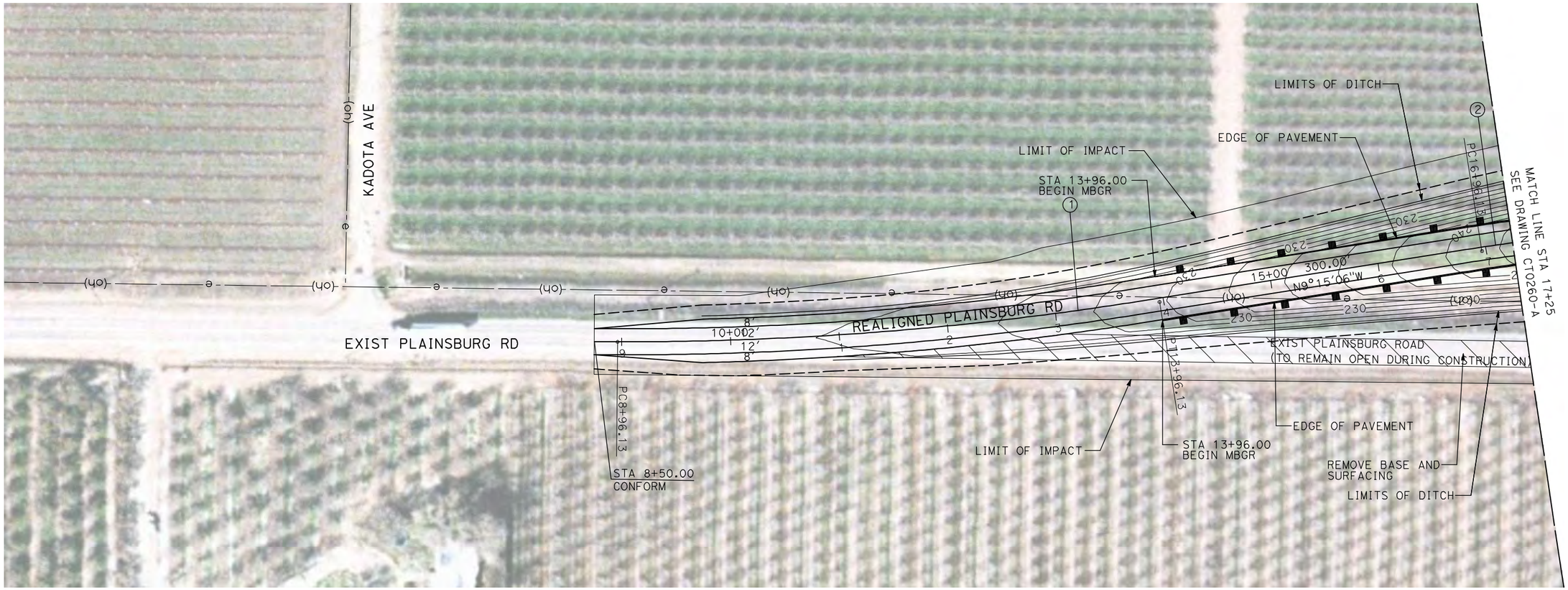
CONTRACT NO. HST06-007
DRAWING NO. CT0258-A
SCALE AS SHOWN
SHEET NO. ### OF ###

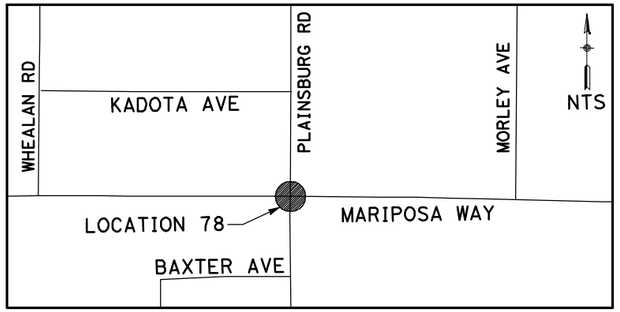
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GibsonR1

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4/29/2011 2:46:19 PM GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1259-A THROUGH CT1261-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

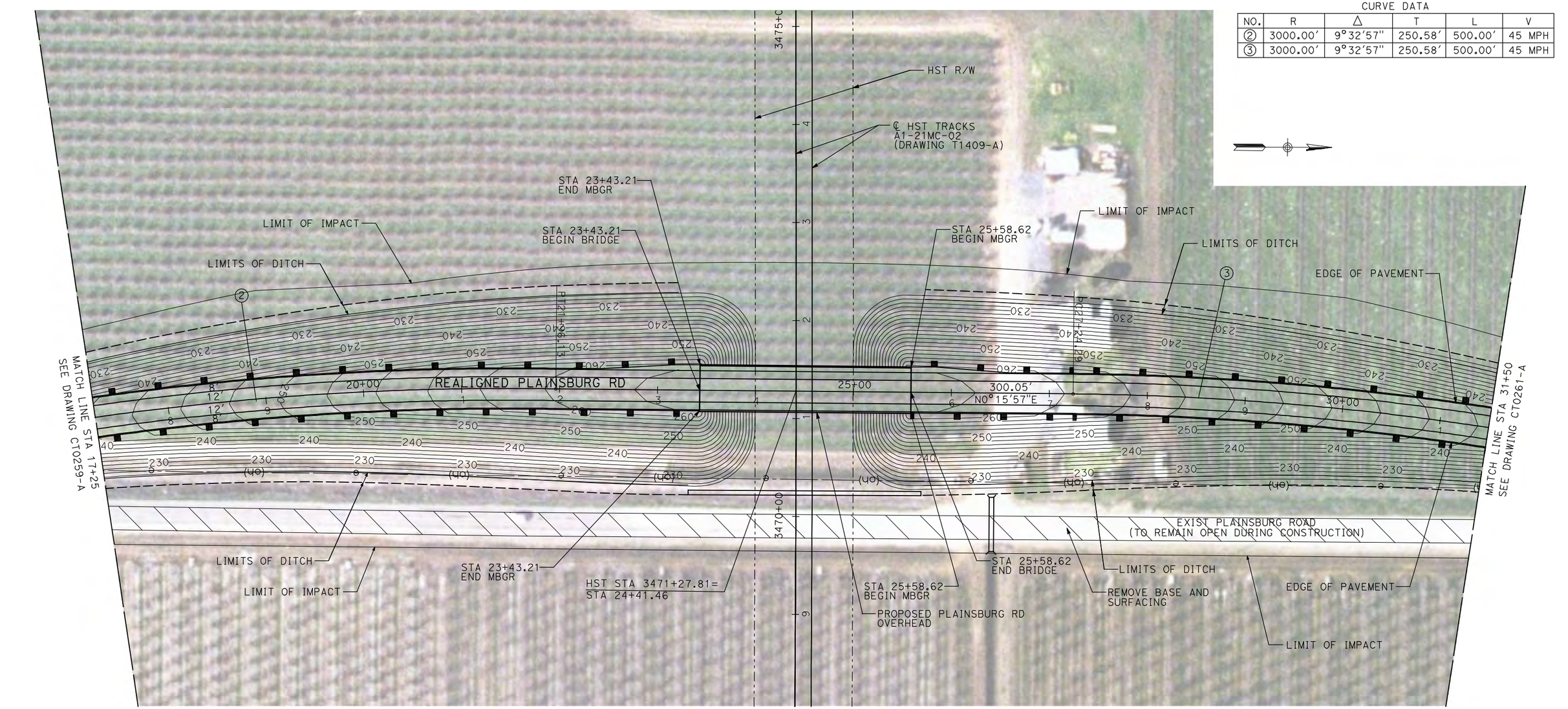
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 1 OF 3

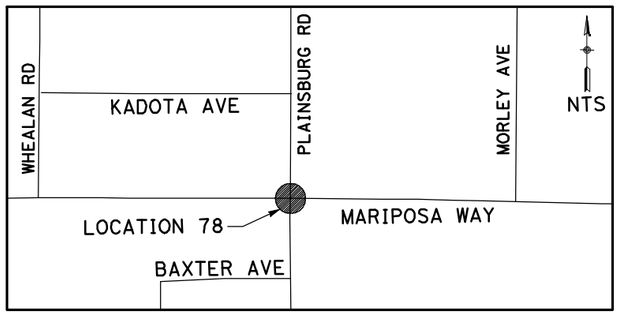
CONTRACT NO. HST06-007
DRAWING NO. CT0259-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:46:26 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1259-A THROUGH CT1261-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

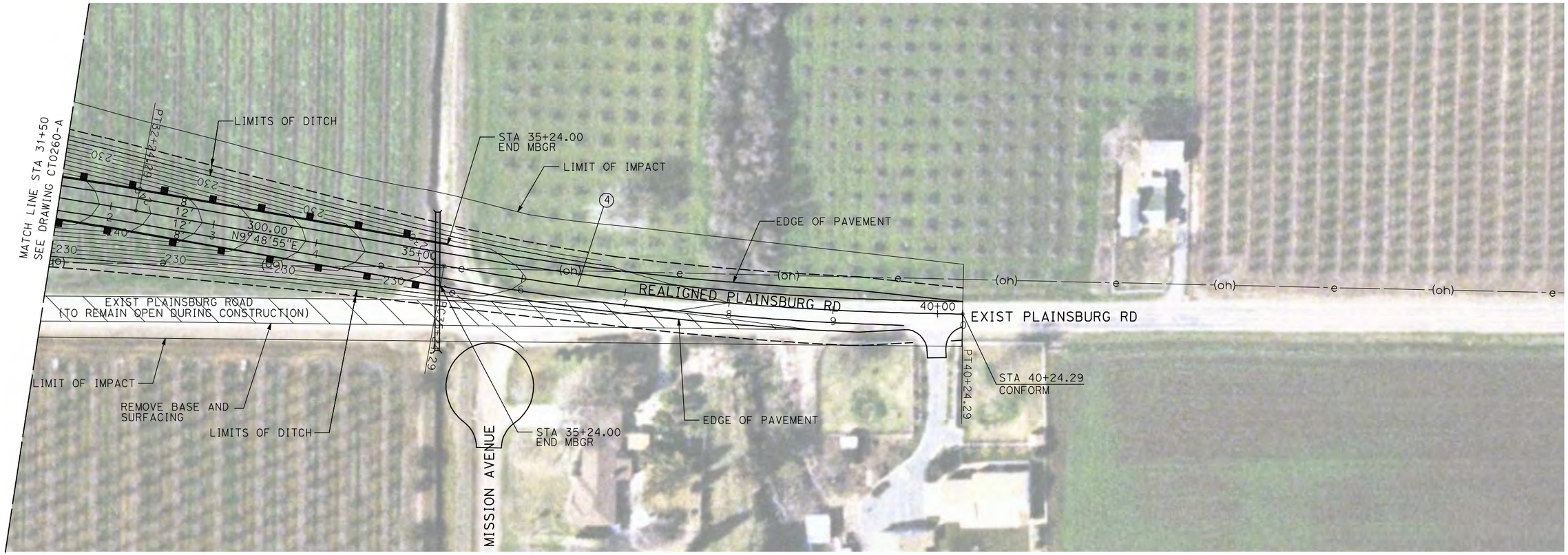
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

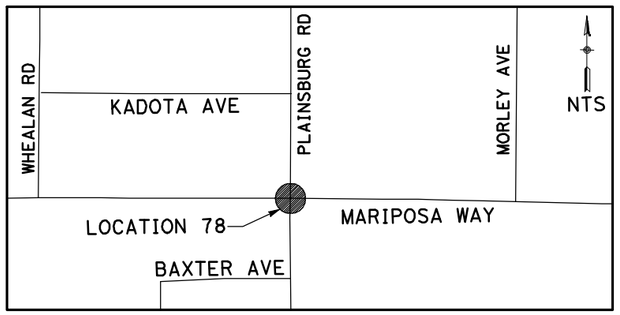
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0260-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1259-A THROUGH CT1261-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

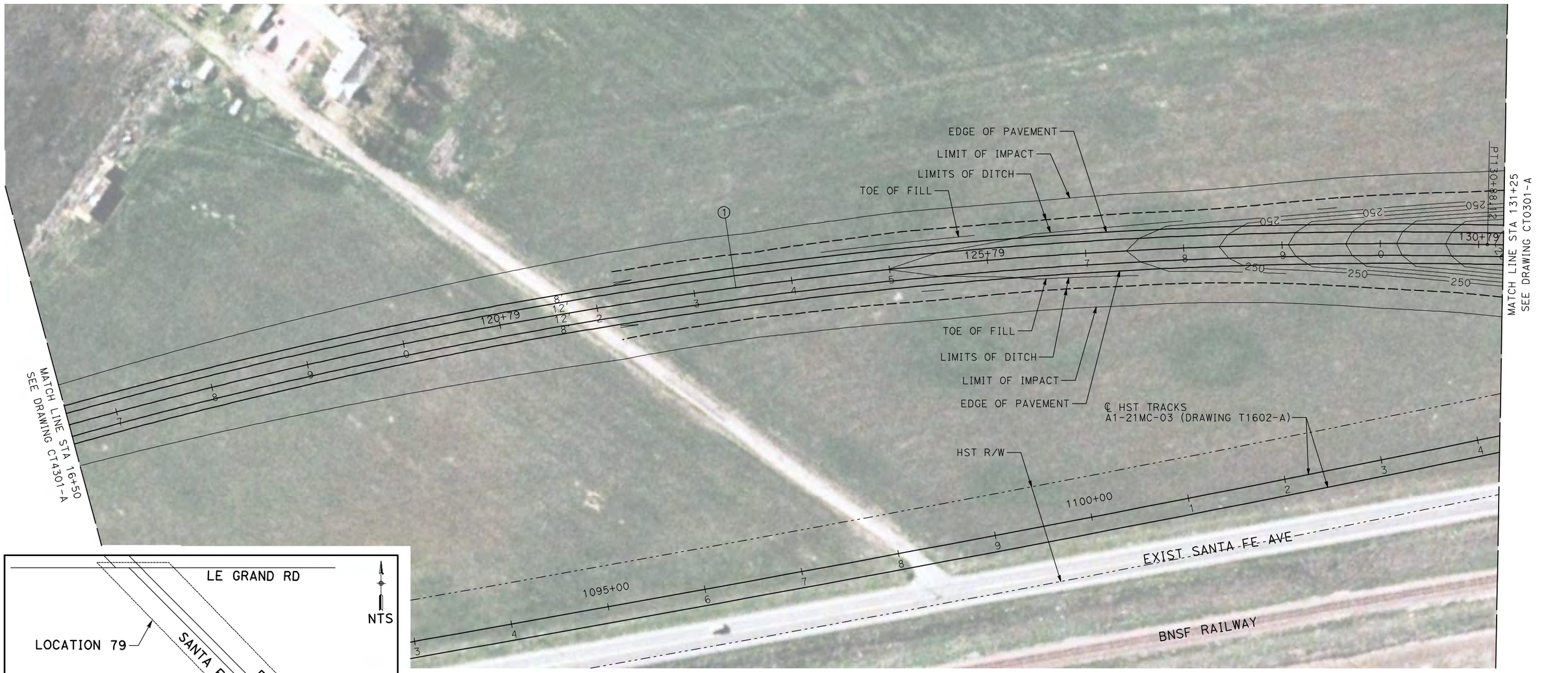
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0261-A
SCALE AS SHOWN
SHEET NO. ### OF ###

4/29/2011 2:46:34 PM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\A1-Ave2124MC02\Volume 1A - Ave 2124 Wye Grade Separation\Layout\WF-CT-0261-A.DGN
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 5000.00' | 23°18'3" | 972.06 | 2033.39' | 45 MPH |
| | | | | | |







NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1300-A THROUGH CT1302-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

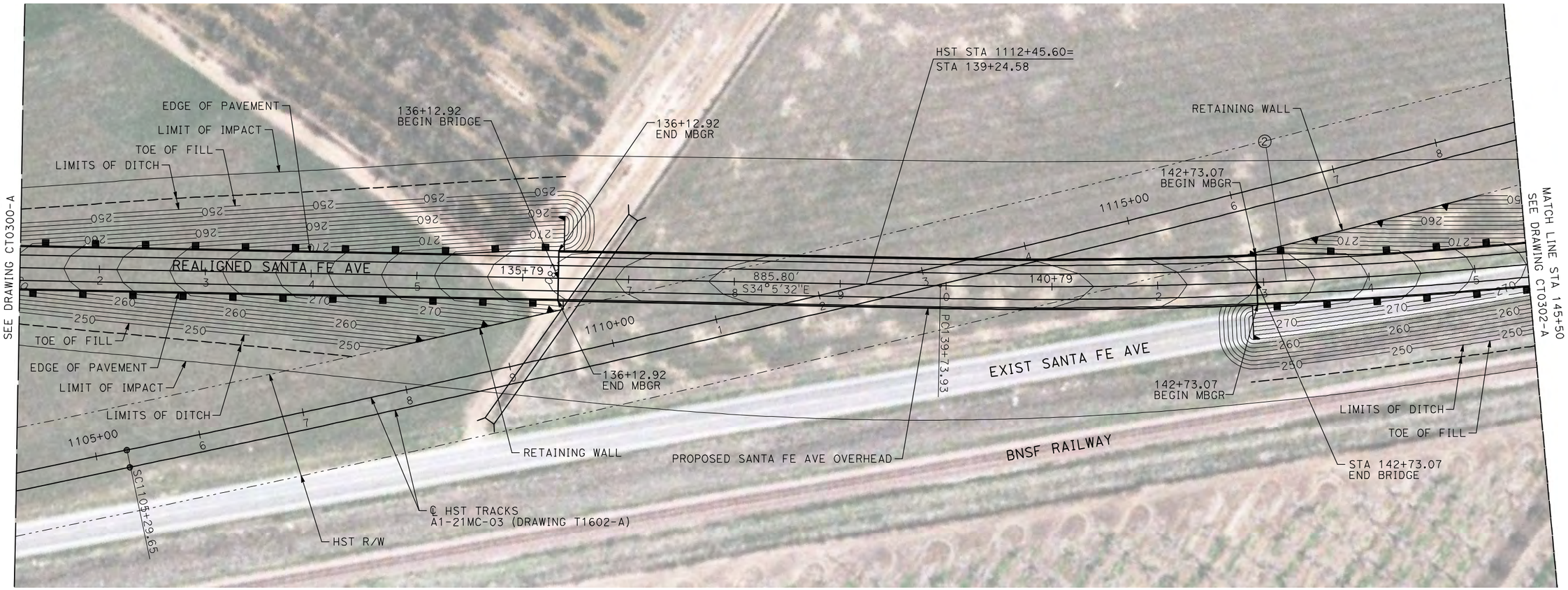
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE AVE
LAYOUT
SHEET 1 OF 3

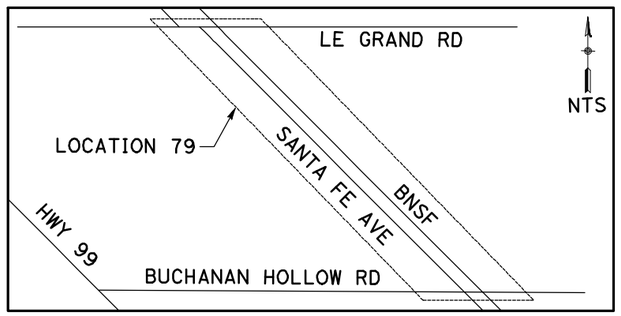
CONTRACT NO. HST06-007
DRAWING NO. CT0300-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00′ | 11°12′59" | 432.94′ | 979.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1300-A THROUGH CT1302-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE AVE
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0301-A
SCALE AS SHOWN
SHEET NO. ### OF ###

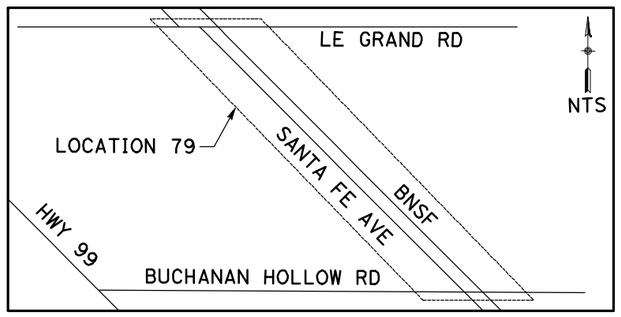

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GibsonR1

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4/29/2011 2:53:28 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 5000.00' | 11°12'59" | 432.94 | 979.00 | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1300-A THROUGH CT1302-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

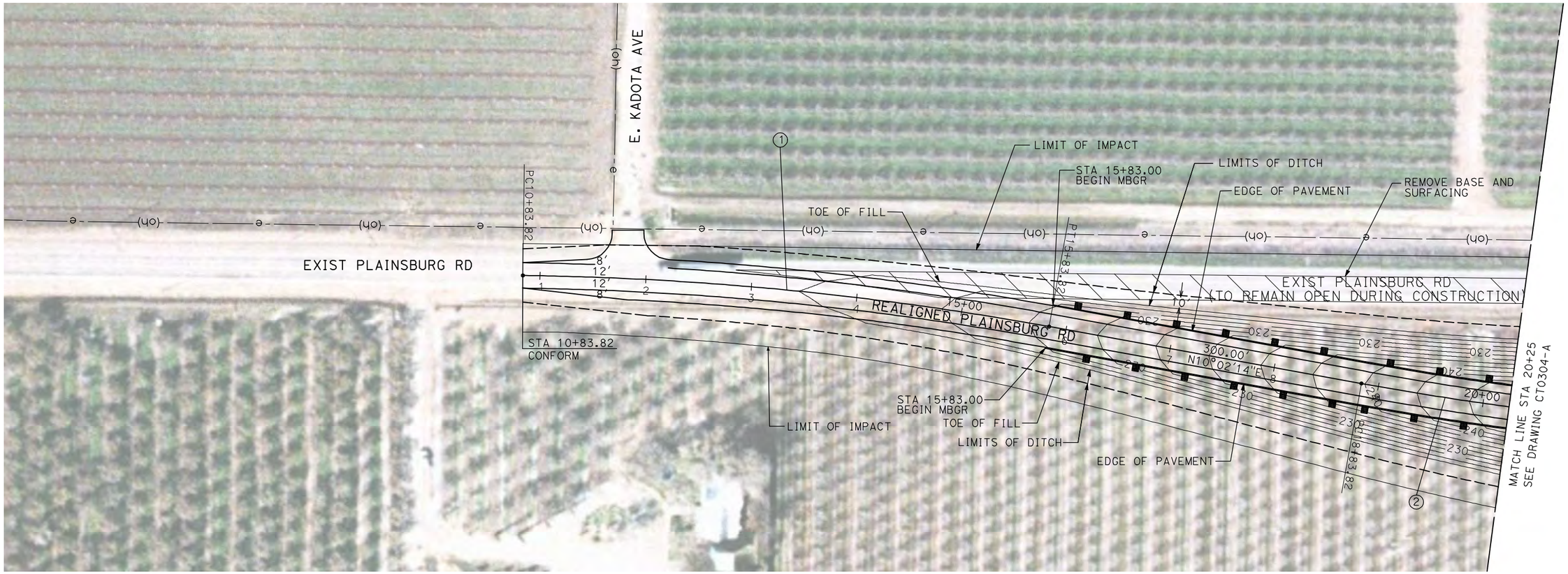
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

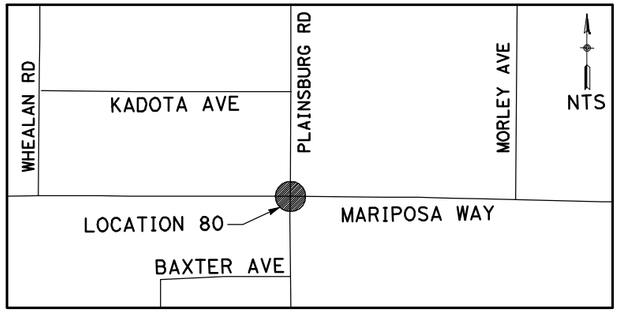
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE AVE
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0302-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1303-A THROUGH CT1305-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**


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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0303-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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4/29/2011 2:53:21 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |

HST R/W

℄ HST TRACKS
A1-21MC-03 (DRAWING T1605-A)

HST STA 1275+70.79=
STA 26+58.27

LIMIT OF IMPACT

LIMITS OF DITCH

TOE OF FILL

STA 25+62.13
END MBGR

STA 25+58.82
BEGIN BRIDGE

STA 27+76.18
BEGIN MBGR

REMOVE BASE AND
SURFACING

EDGE OF PAVEMENT

LIMITS OF DITCH

TOE OF FILL

EXIST PLAINSBURG RD
(TO REMAIN OPEN DURING CONSTRUCTION)

EXIST PLAINSBURG RD TO SERVE AS
POTENTIAL PRIVATE PROPERTY ACCESS

MATCH LINE STA 20+25
SEE DRAWING CT0303-A

MATCH LINE STA 34+25
SEE DRAWING CT0305-A

300.05 25+00
N0°29′17"E

30+00 REALIGNED PLAINSBURG RD

1275+00

PI 29+41.81

TOE OF FILL

LIMITS OF DITCH

LIMIT OF IMPACT

STA 25+56.14
END MBGR

EDGE OF PAVEMENT

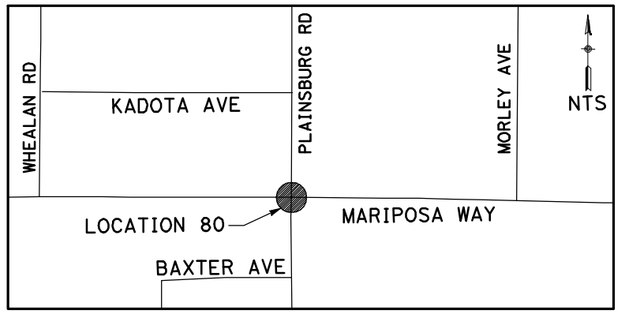
TOE OF FILL

LIMITS OF DITCH

STA 27+72.87
END BRIDGE

STA 27+70.19
BEGIN MBGR

PROPOSED PLAINSBURG RD
OVERHEAD




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1303-A THROUGH CT1305-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 2 OF 3

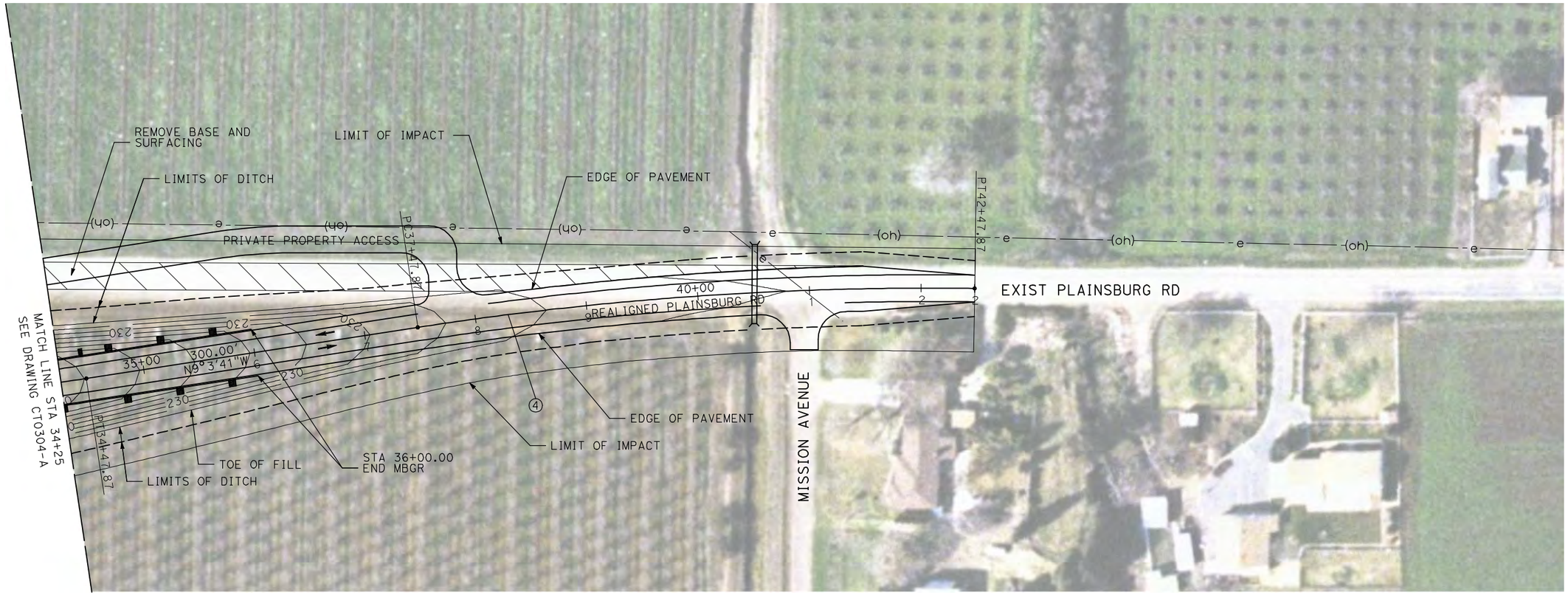
CONTRACT NO. HST06-007
DRAWING NO. CT0304-A
SCALE AS SHOWN
SHEET NO. ### OF ###

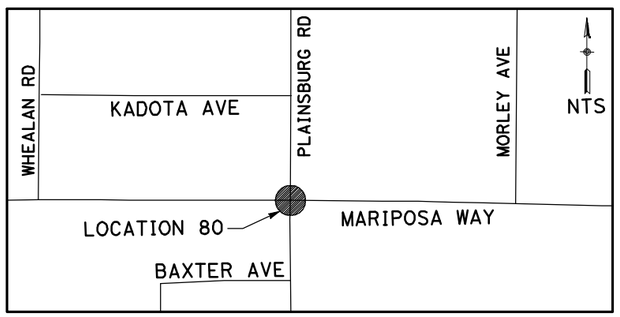
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GibsonR1

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4/29/2011 2:53:05 PM
GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1303-A THROUGH CT1305-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811

CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

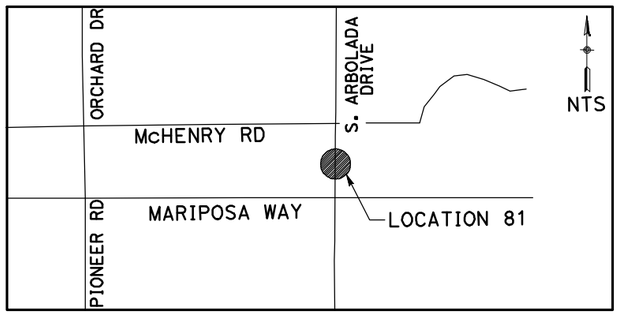
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0305-A
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1306-A THROUGH CT1308-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

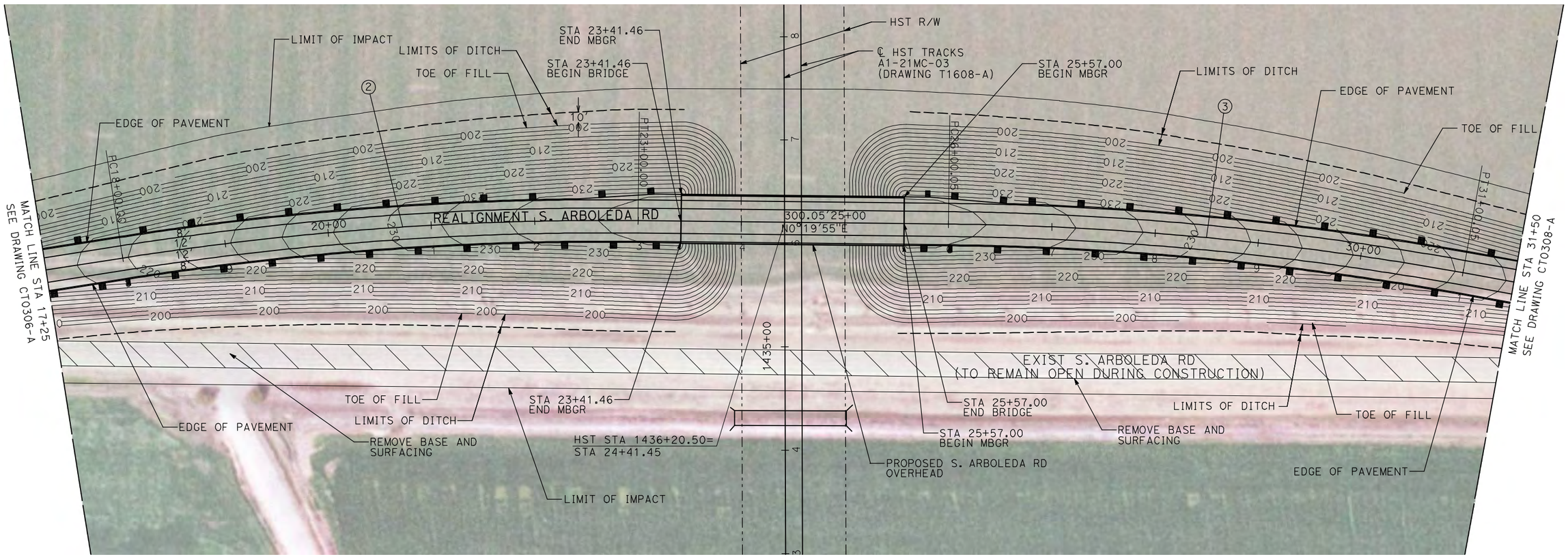
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ARBOLEDA RD
LAYOUT
SHEET 1 OF 3

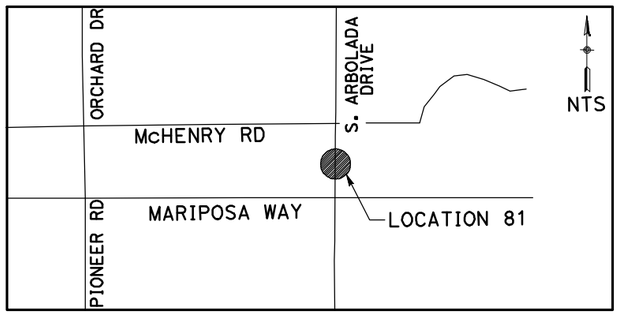
CONTRACT NO. HST06-007
DRAWING NO. CT0306-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1306-A THROUGH CT1308-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

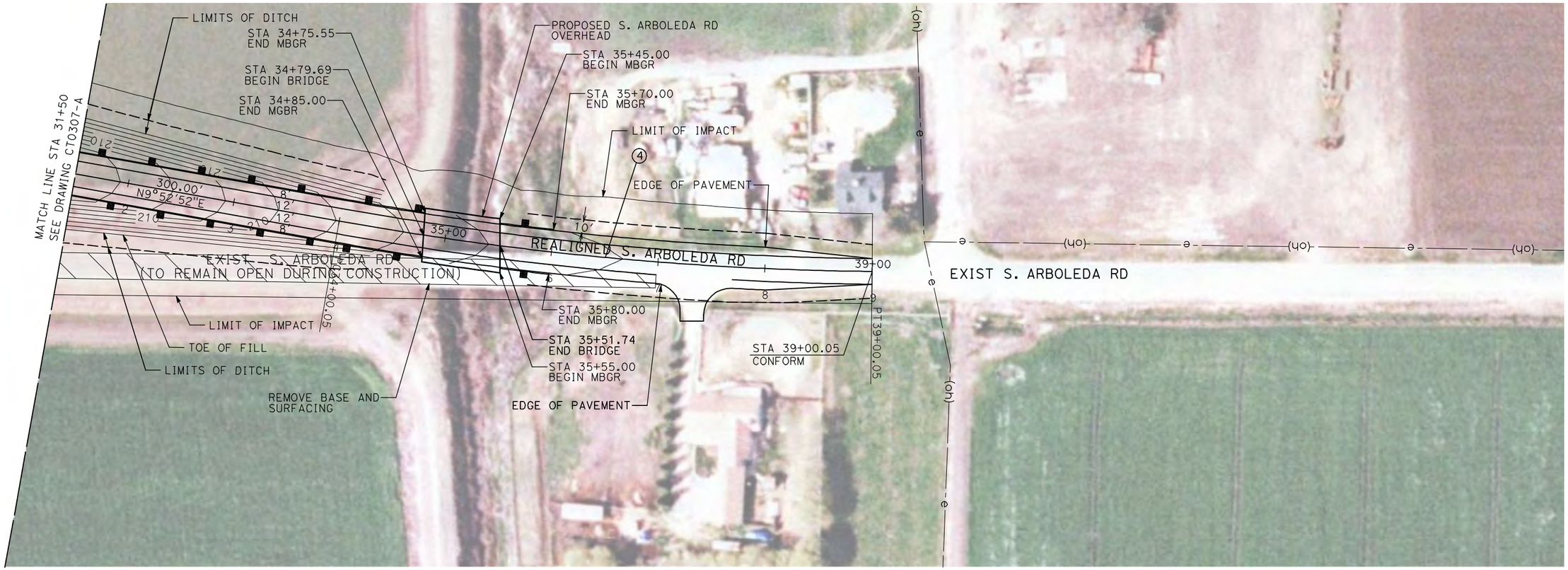
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ARBOLEDA RD
LAYOUT
SHEET 2 OF 3

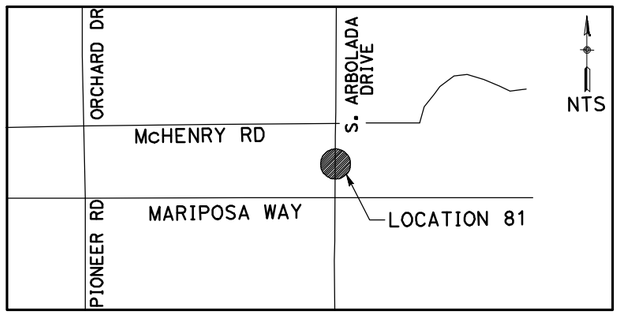
CONTRACT NO. HST06-007
DRAWING NO. CT0307-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1306-A THROUGH CT1308-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

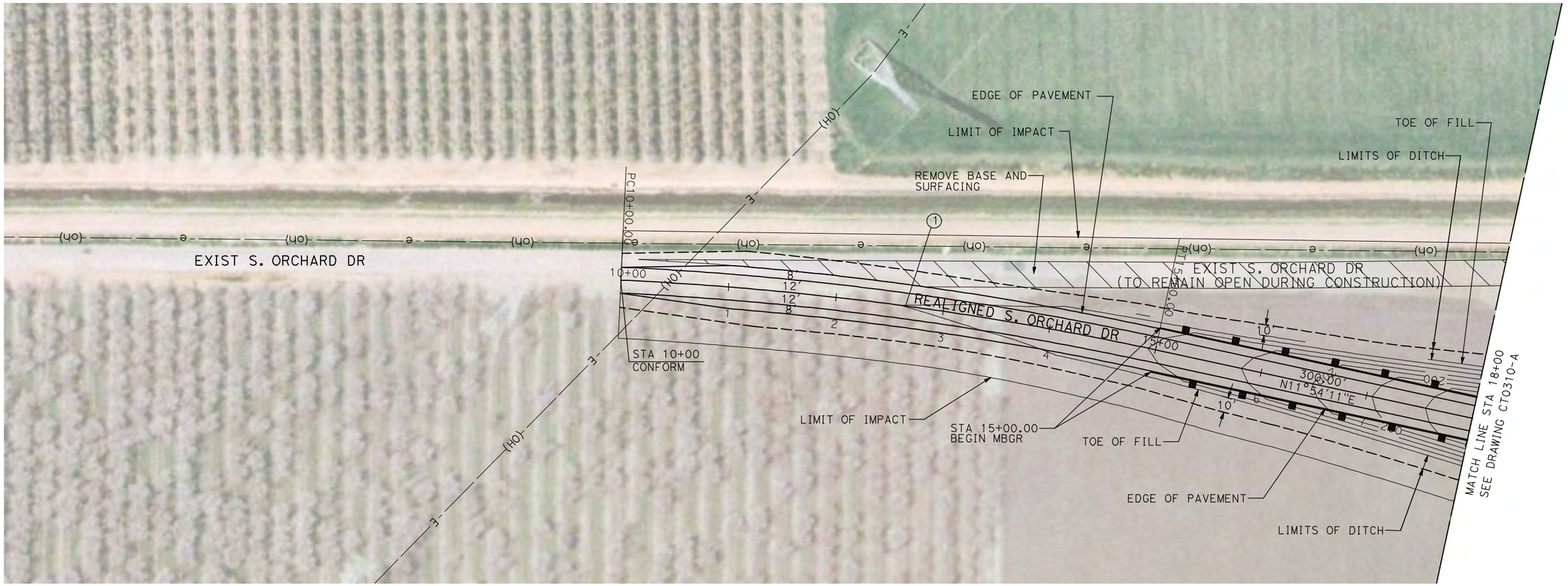
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ARBOLEDA RD
LAYOUT
SHEET 3 OF 3

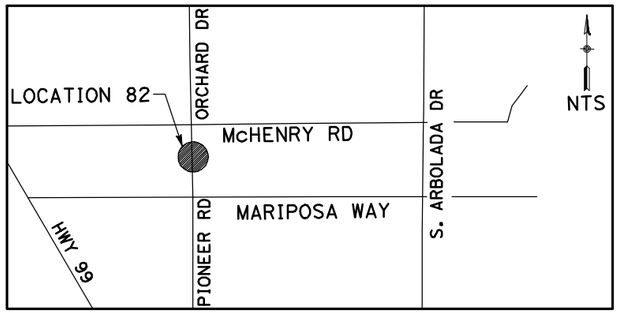
CONTRACT NO. HST06-007
DRAWING NO. CT0308-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ① | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1309-A THROUGH CT1311-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

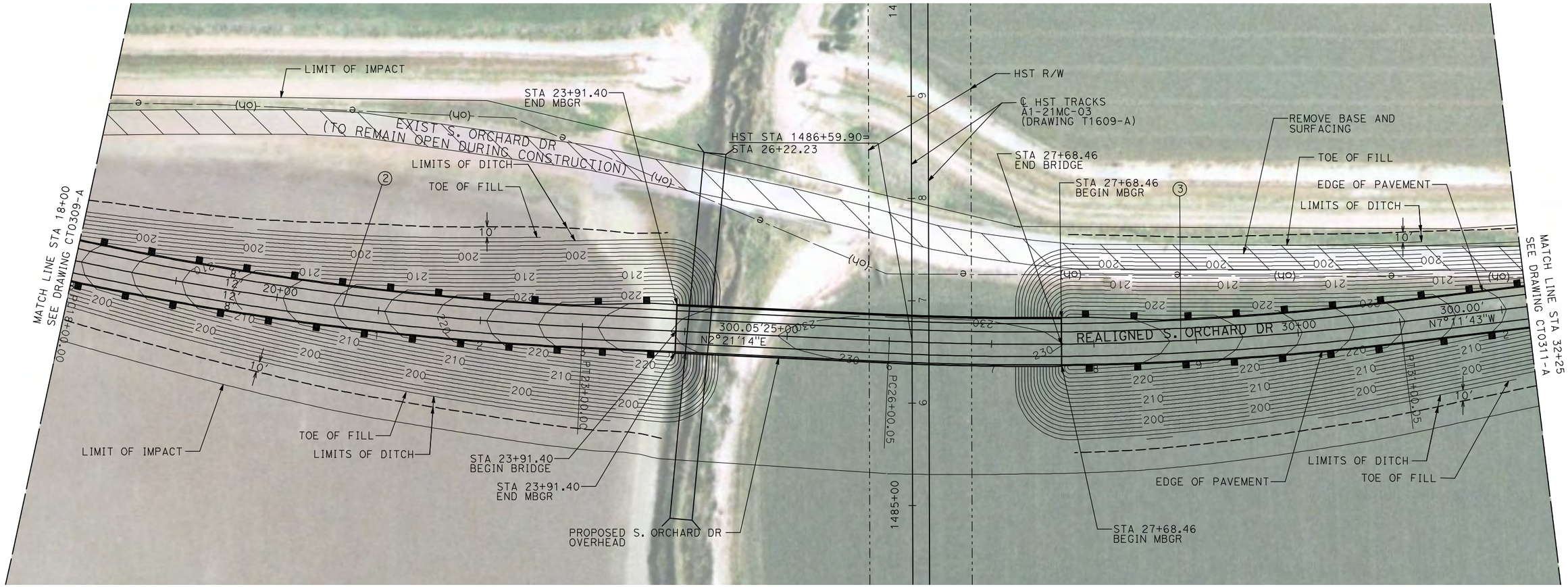
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ORCHARD DR
LAYOUT
SHEET 1 OF 3

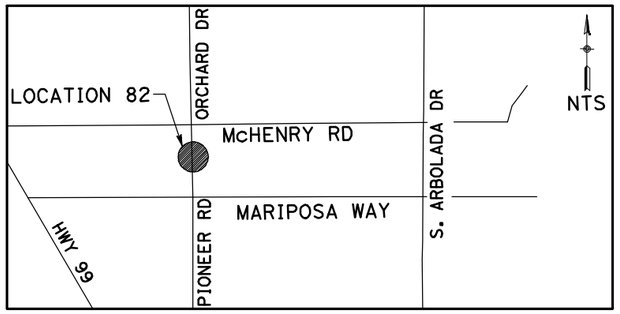
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DRAWING NO. CT0309-A
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SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ② | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |
| ③ | 3000.00′ | 9°32′57" | 250.58′ | 500.00′ | 45 MPH |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1309-A THROUGH CT1311-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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Sacramento, CA 95811

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

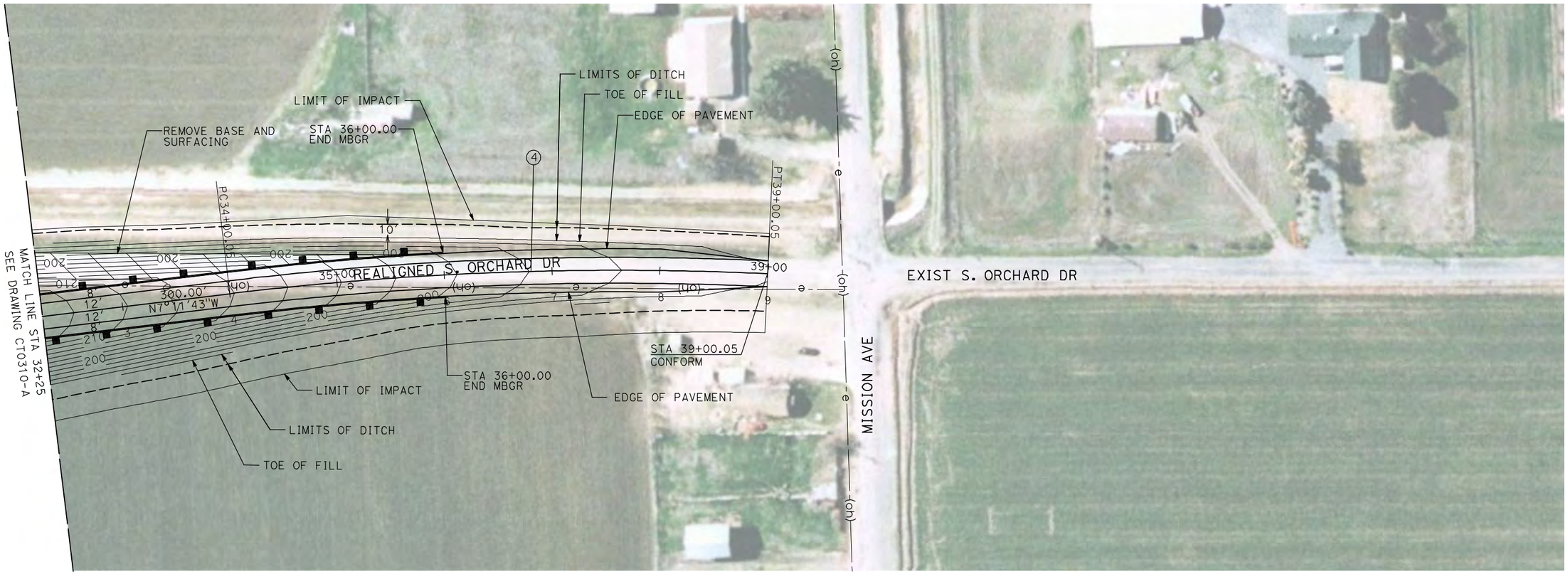
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ORCHARD DR
LAYOUT
SHEET 2 OF 3

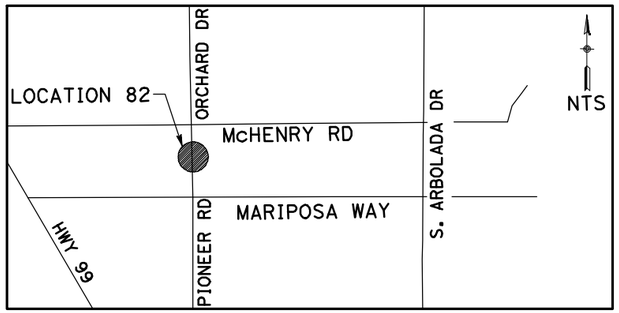
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SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

CURVE DATA

| NO. | R | Δ | T | L | V |
|---|---|---|---|---|---|
| ④ | 3000.00′ | 9°32′57″ | 250.58′ | 500.00′ | 45 MPH |
| | | | | | |




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT1309-A THROUGH CT1311-A.

50 0 50 100
1"=50′

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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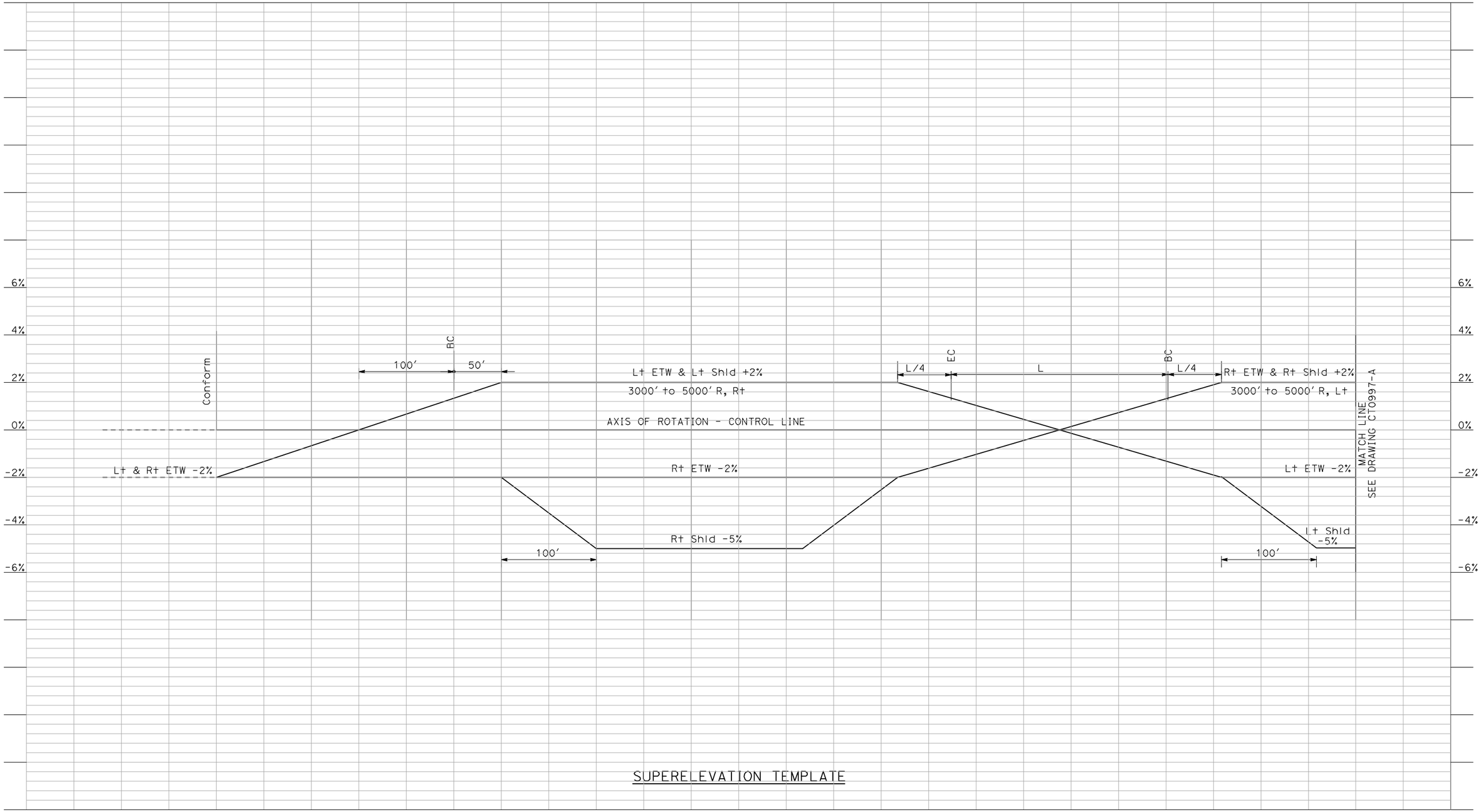
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ORCHARD DR
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CT0311-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




SUPERELEVATION TEMPLATE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. LI
DRAWN BY: A. TRINH
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 02/17/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

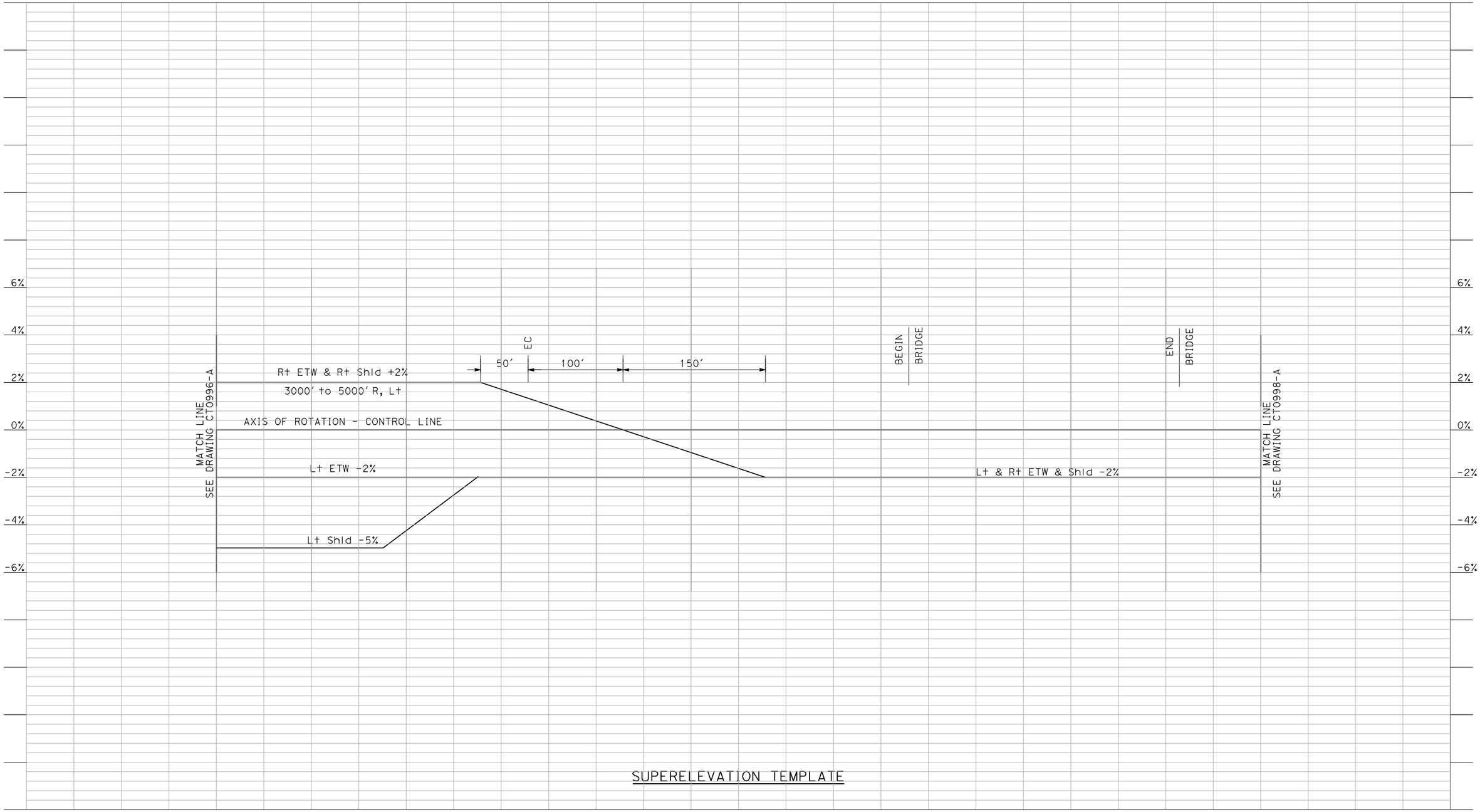
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE
GRADE SEPARATION
SUPERELEVATION TEMPLATE
SHEET 1 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT0996-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




SUPERELEVATION TEMPLATE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. LI
DRAWN BY: A. TRINH
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 02/17/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Technical Services, Inc.
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

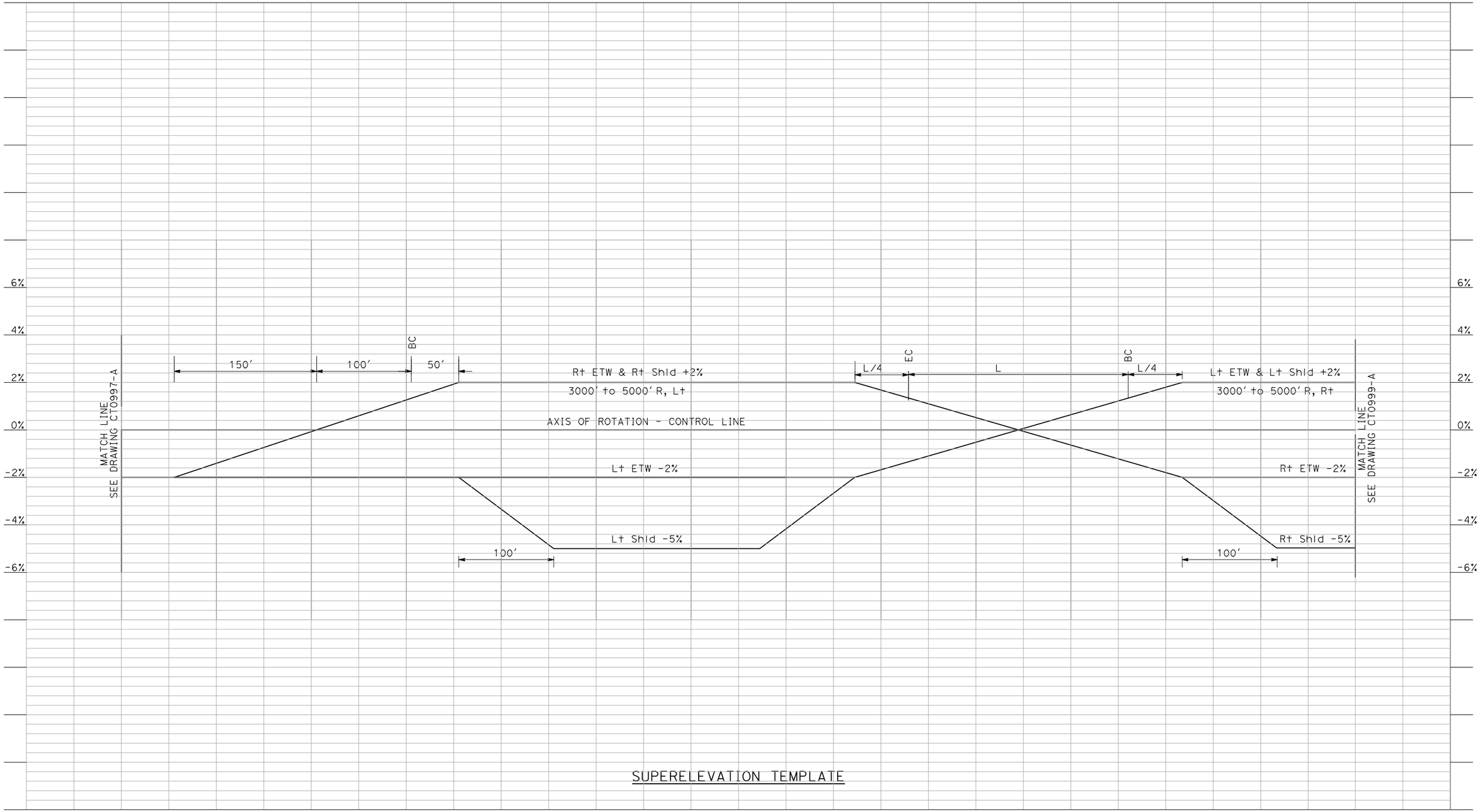
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF - AVE 21 WYE
GRADE SEPARATION
SUPERELEVATION TEMPLATE
SHEET 2 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT0997-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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GibsonR1




SUPERELEVATION TEMPLATE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. LI
DRAWN BY: A. TRINH
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 02/17/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811

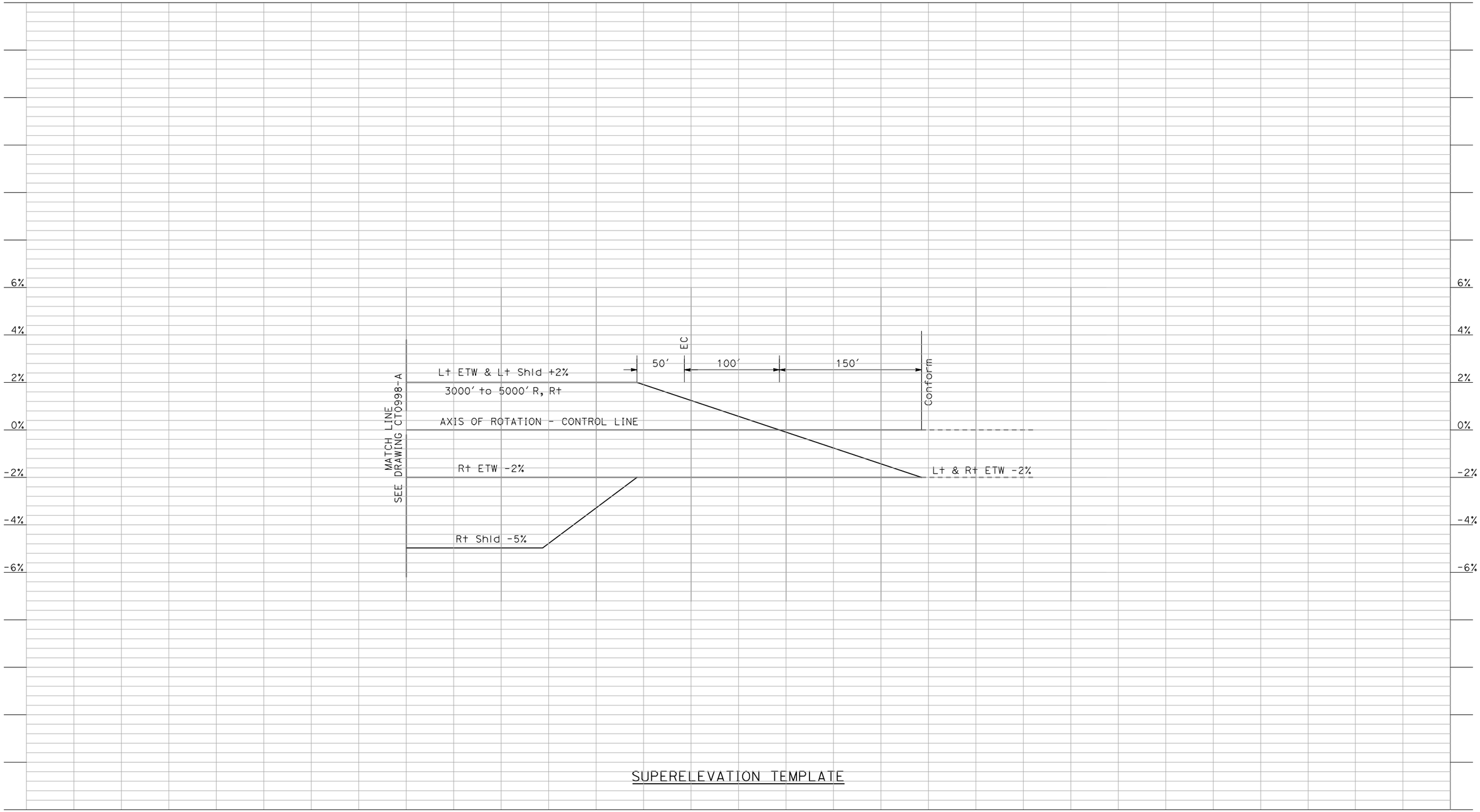
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF - AVE 21 WYE
GRADE SEPARATION
SUPERELEVATION TEMPLATE
SHEET 3 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT0998-A
SCALE AS SHOWN
SHEET NO. ### OF ###




SUPERELEVATION TEMPLATE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. LI
DRAWN BY: A. TRINH
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 02/17/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811

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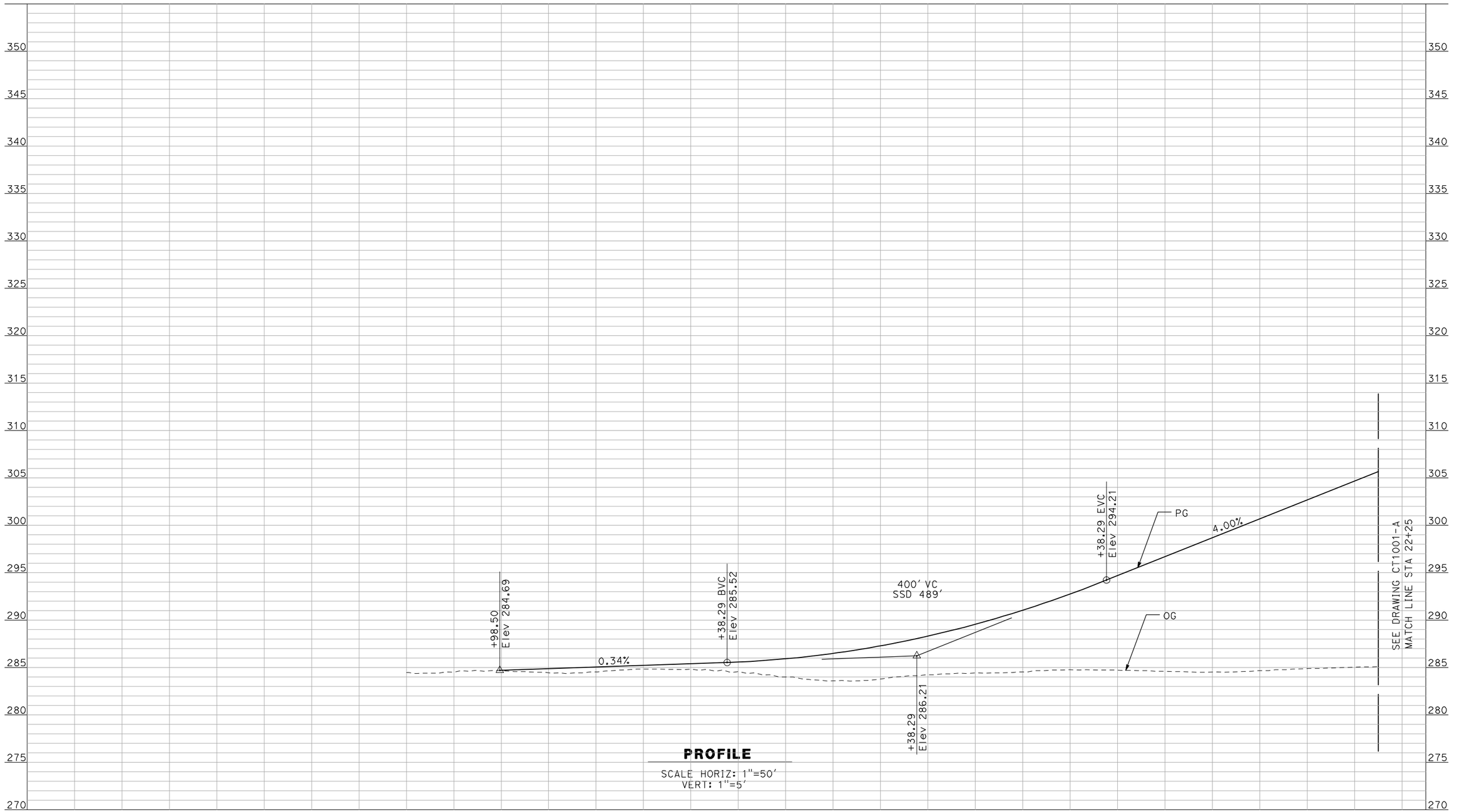
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
GRADE SEPARATION
SUPERELEVATION TEMPLATE
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT0999-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:01:45 PM
GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM
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Sacramento, CA 95811
CH2MHILL

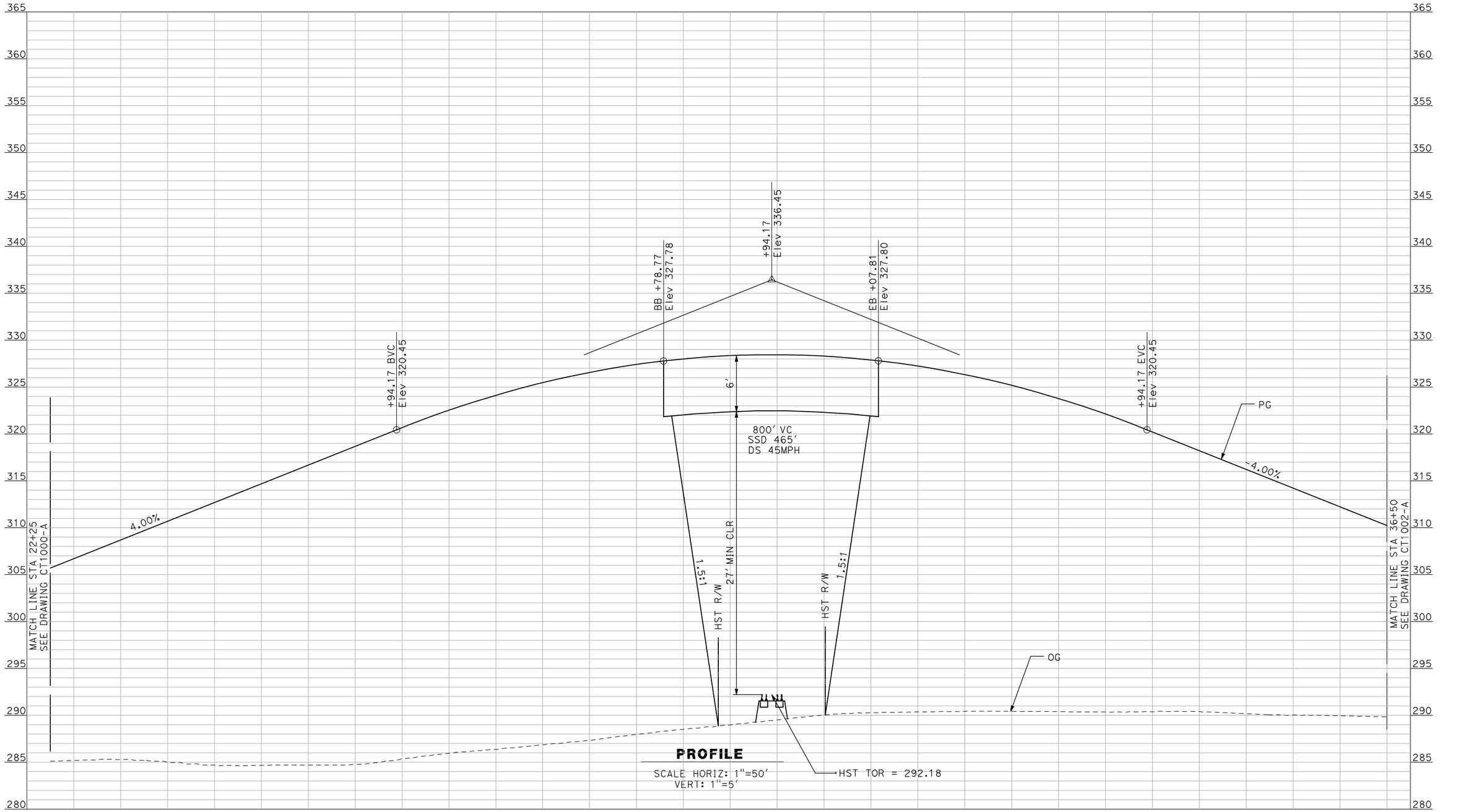
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 9
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1000-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:01:49 PM
GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM
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Sacramento, CA 95811
CH2MHILL

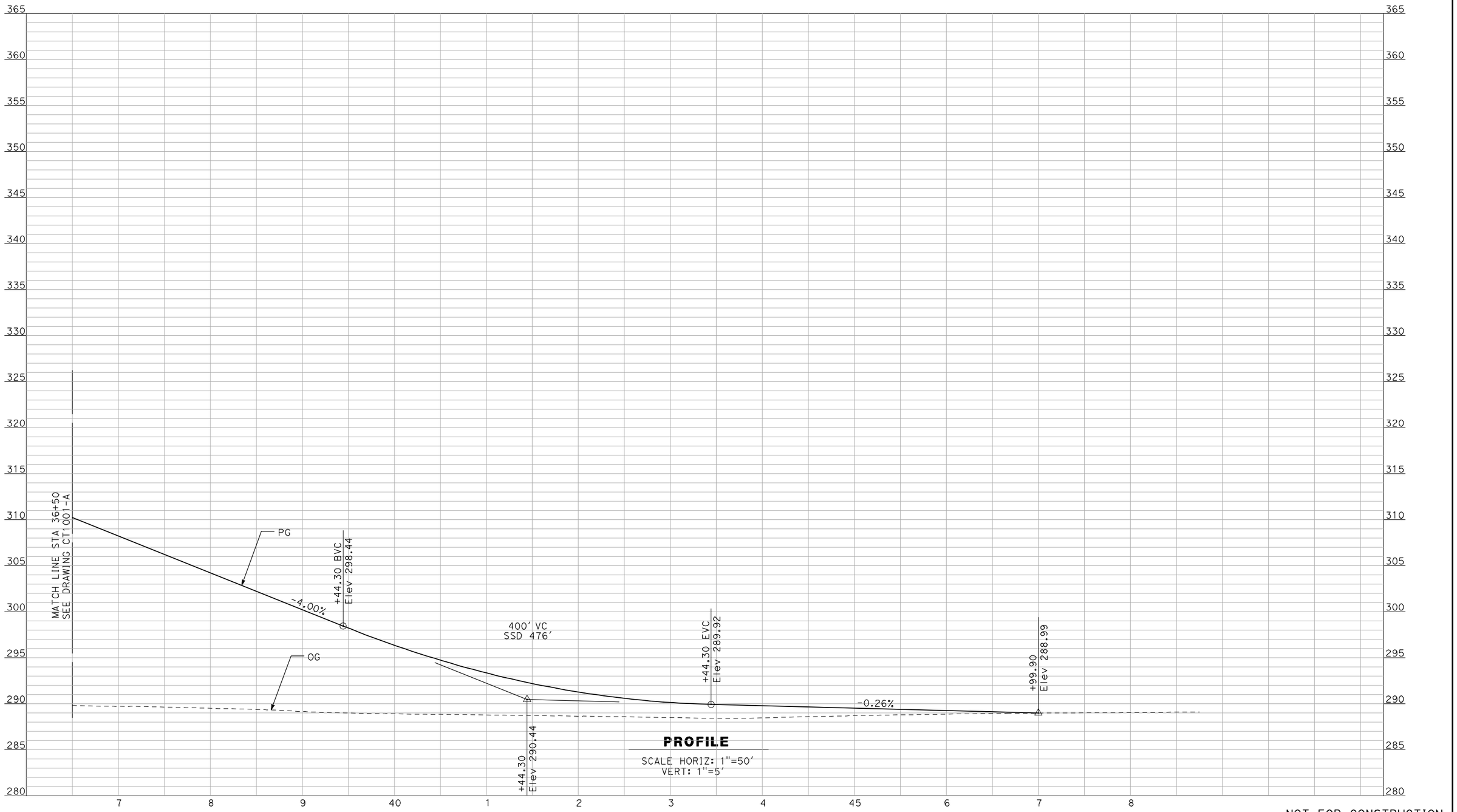
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 9
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1001-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:01:53 PM
GibsonR1




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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Technical Services, Inc.
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 9
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1002-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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Sacramento, CA 95811
CH2MHILL

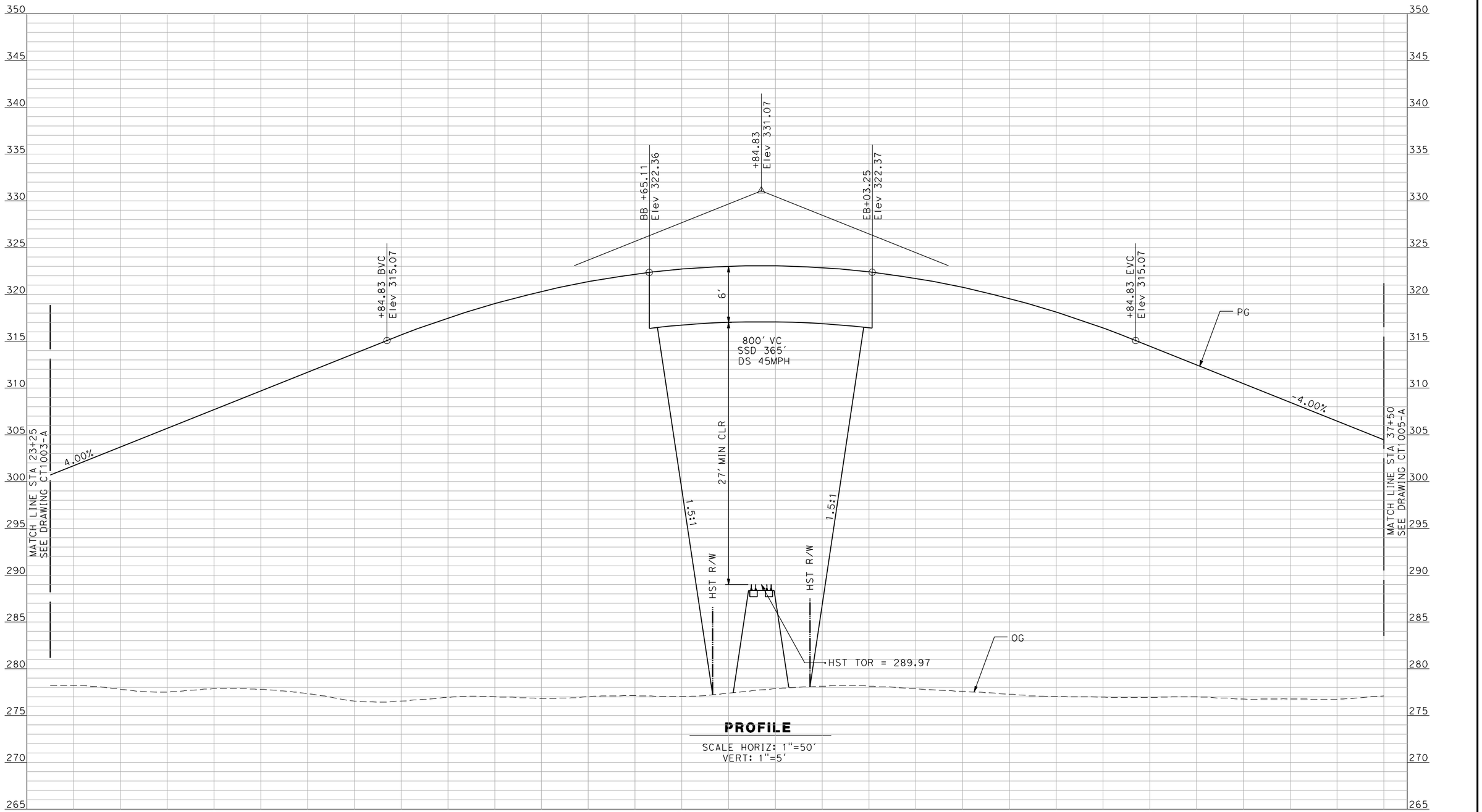
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 10
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1003-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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1/10/2012 3:57:45 PM
GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

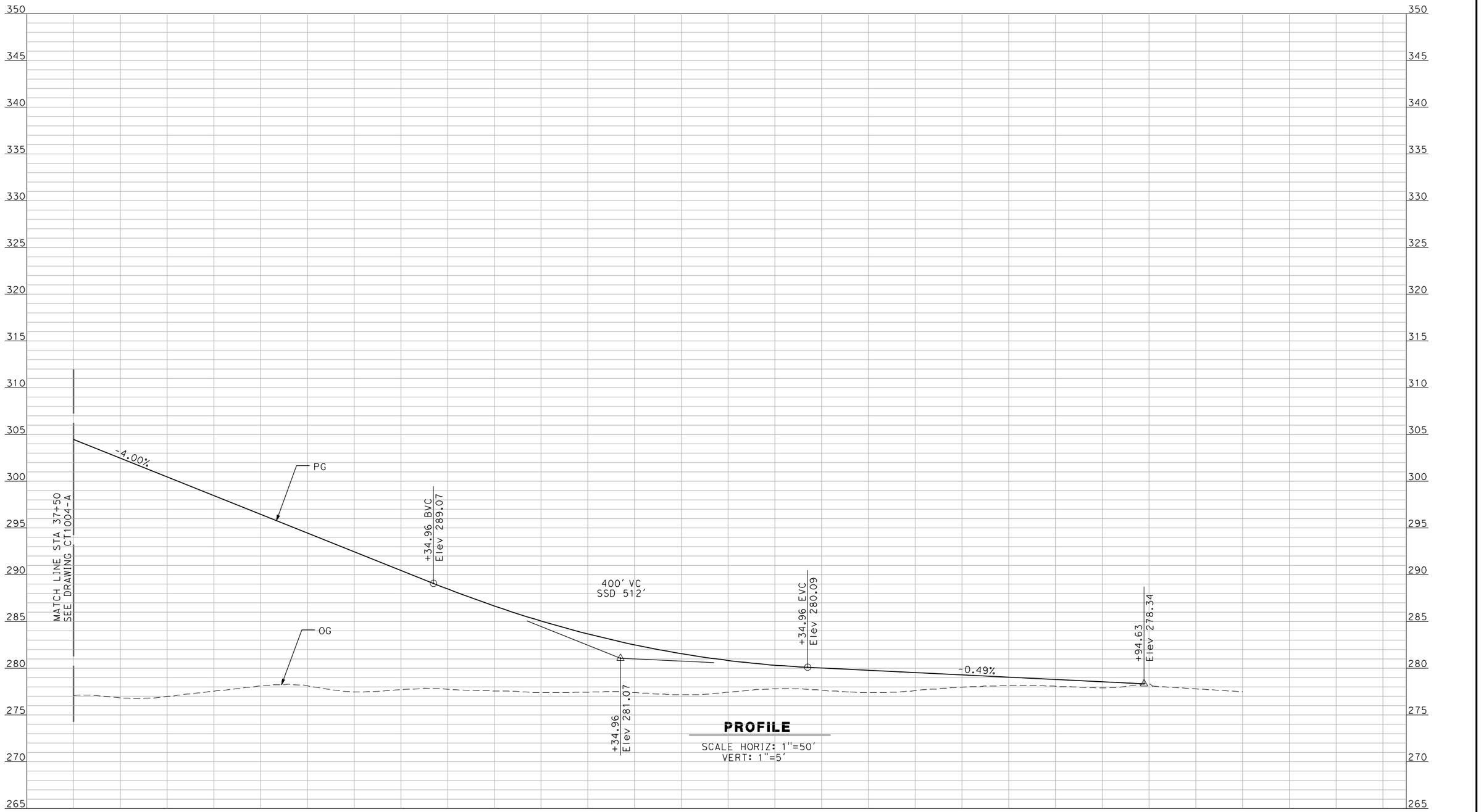
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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 10
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1004-A
SCALE AS SHOWN
SHEET NO. ### OF ###




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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

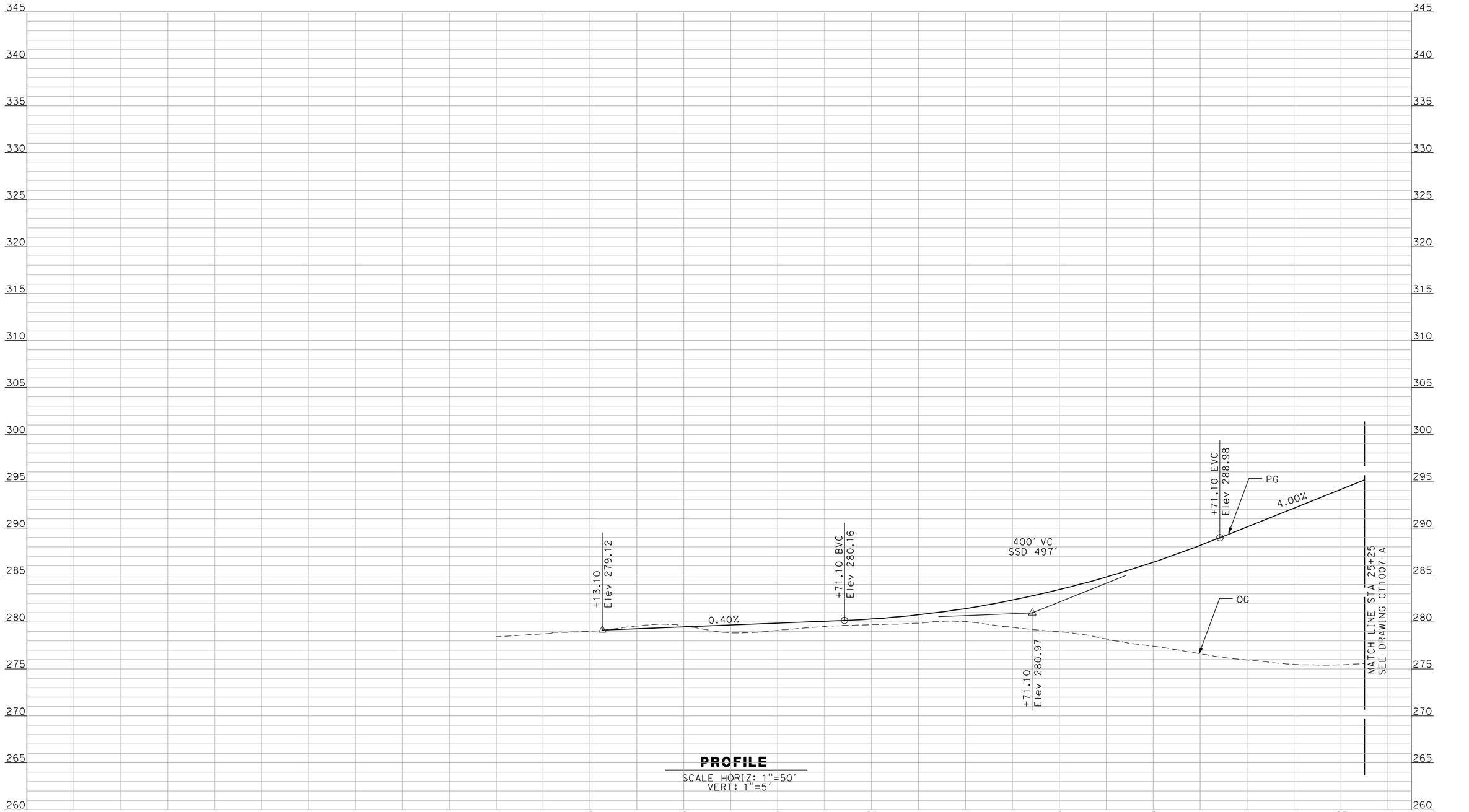
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 10
PROFILE
SHEET 3 OF 3

| | |
|---|---|
| CONTRACT NO. | HSR06-007 |
| DRAWING NO. | CT1005-A |
| SCALE | AS SHOWN |
| SHEET NO. | ### OF ### |

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

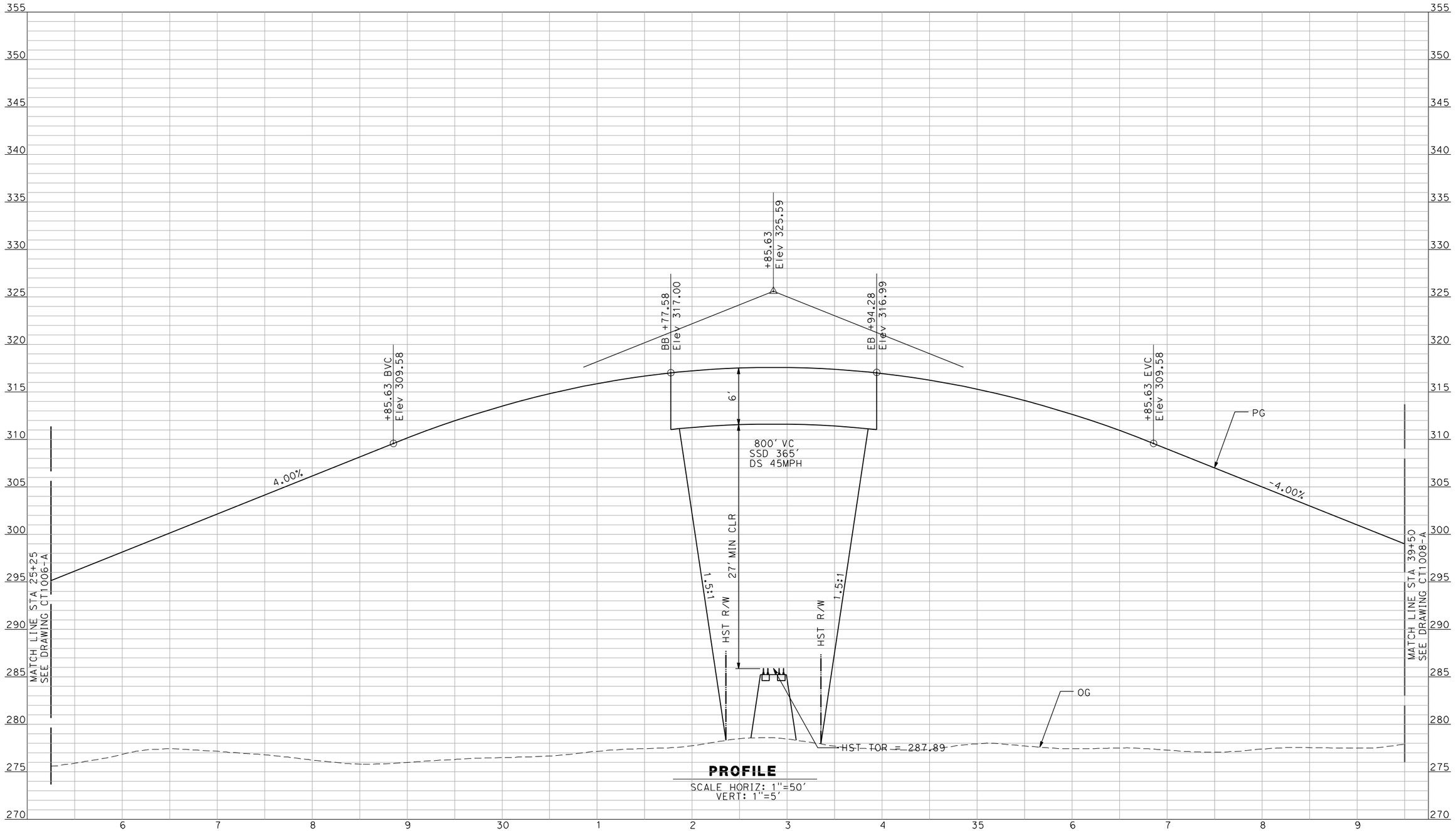
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 11
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1006-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

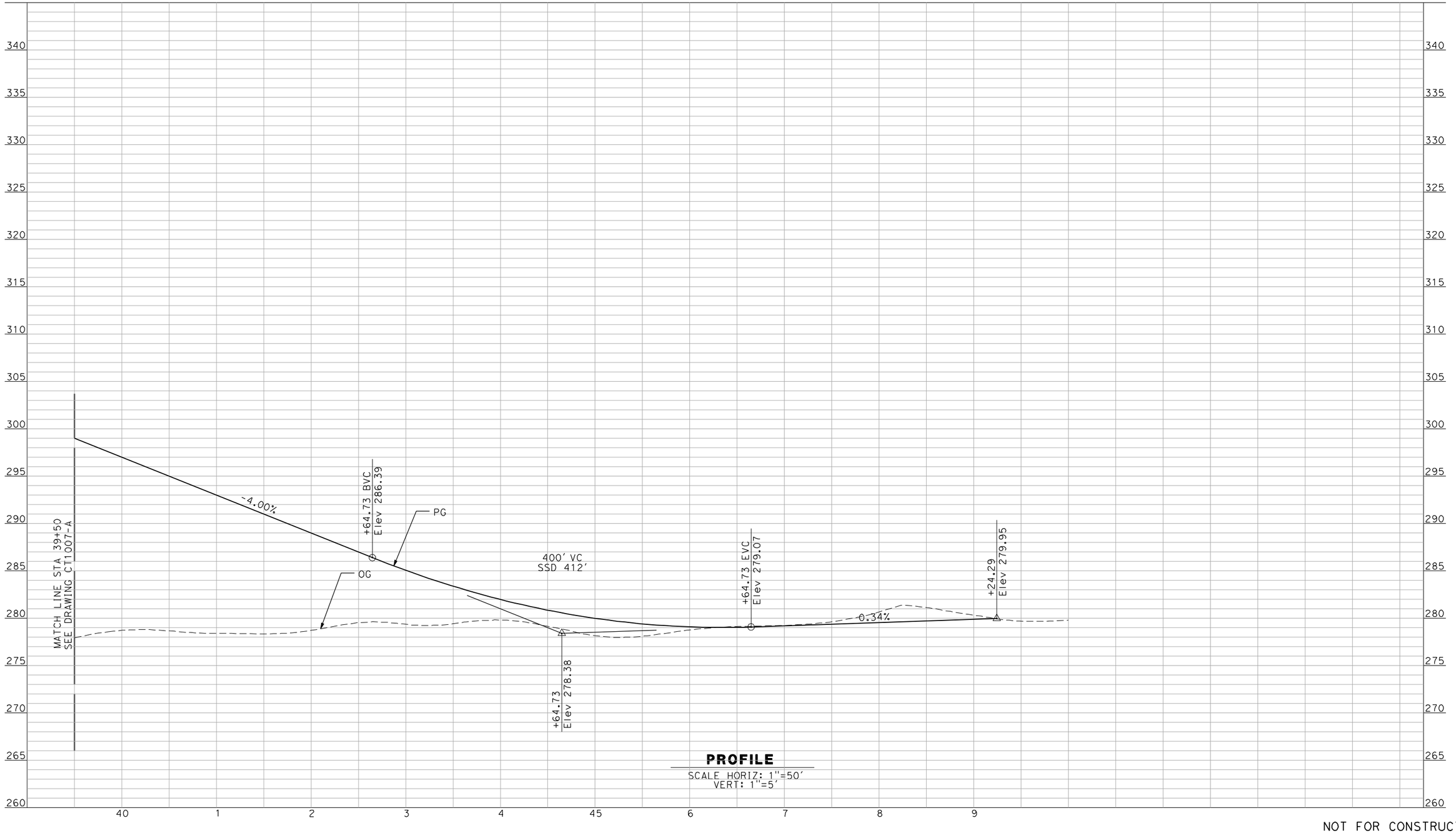
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 11
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1007-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
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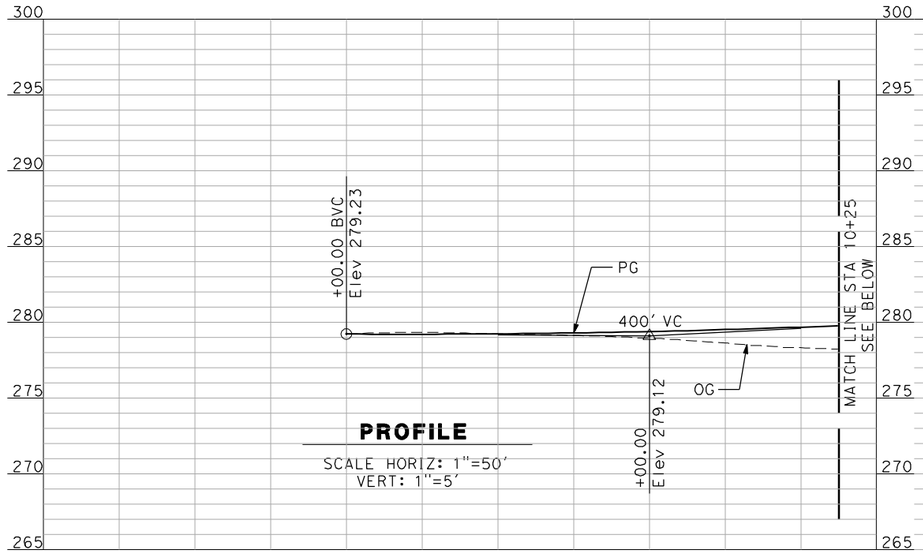
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

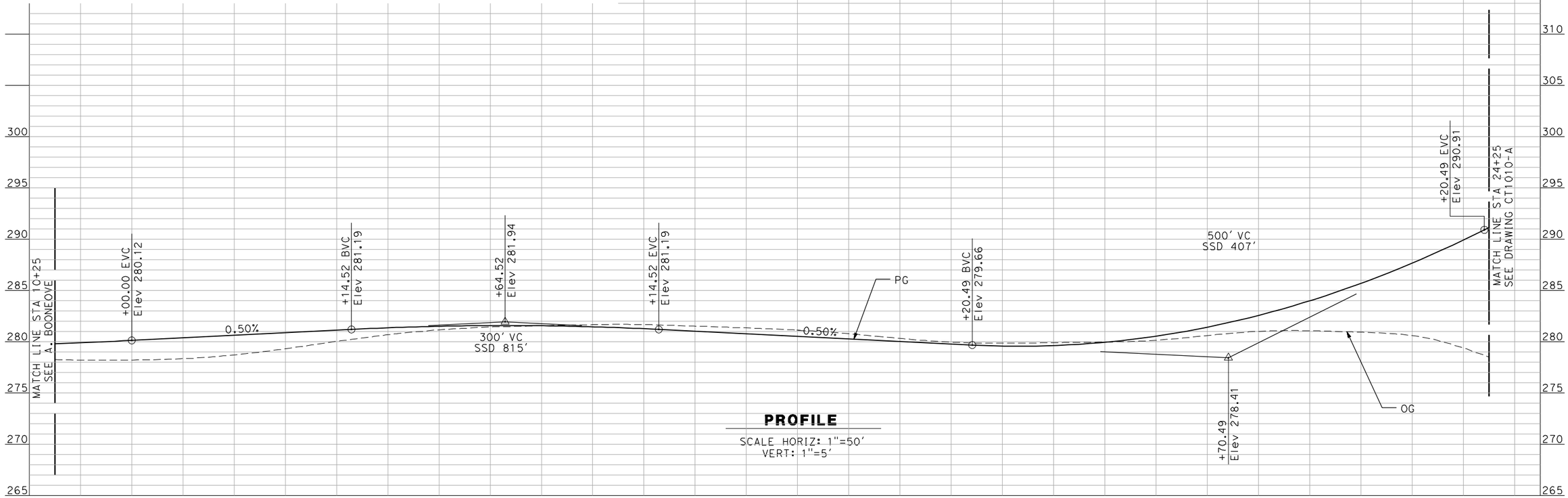
BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 11
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1008-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

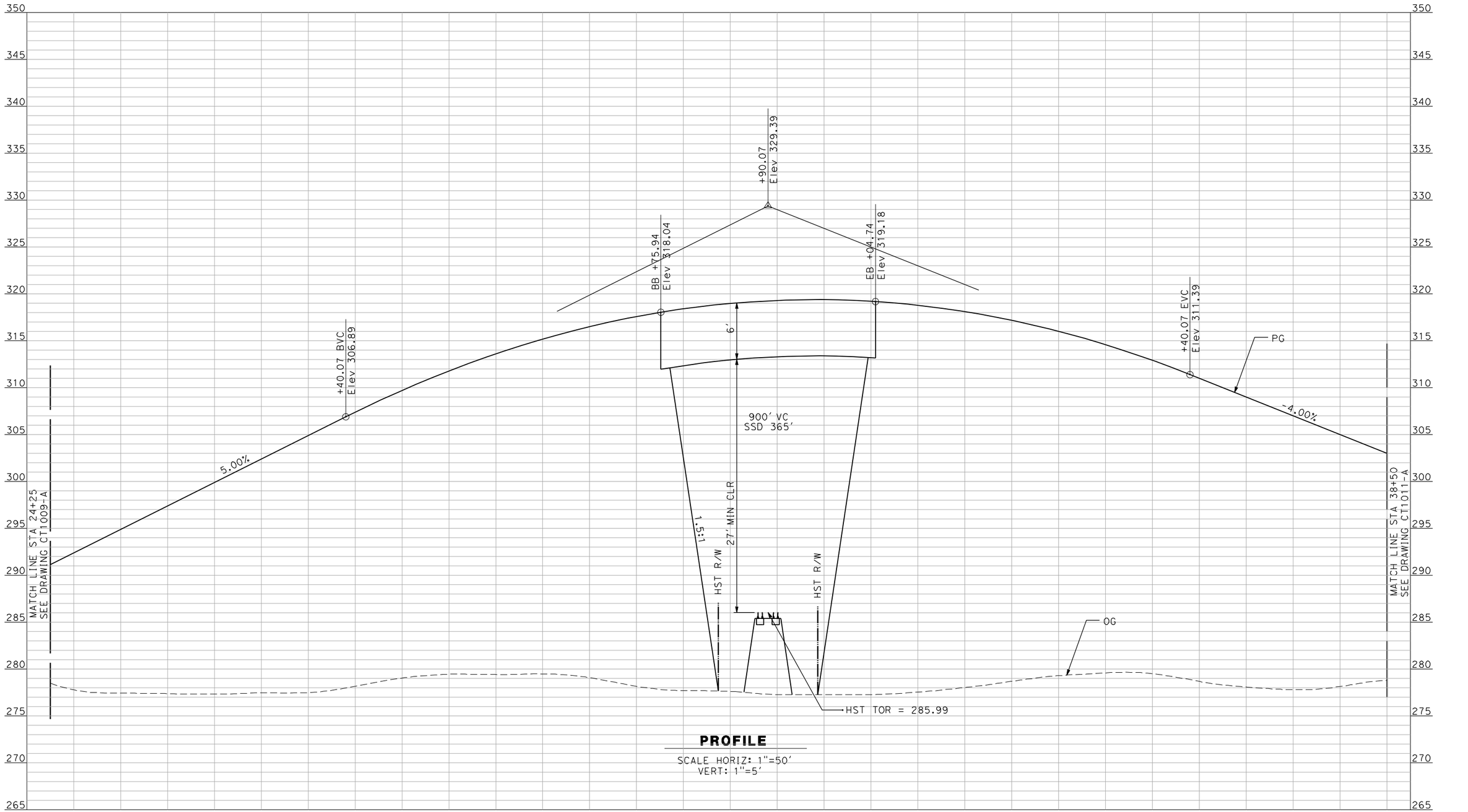
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 12
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1009-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

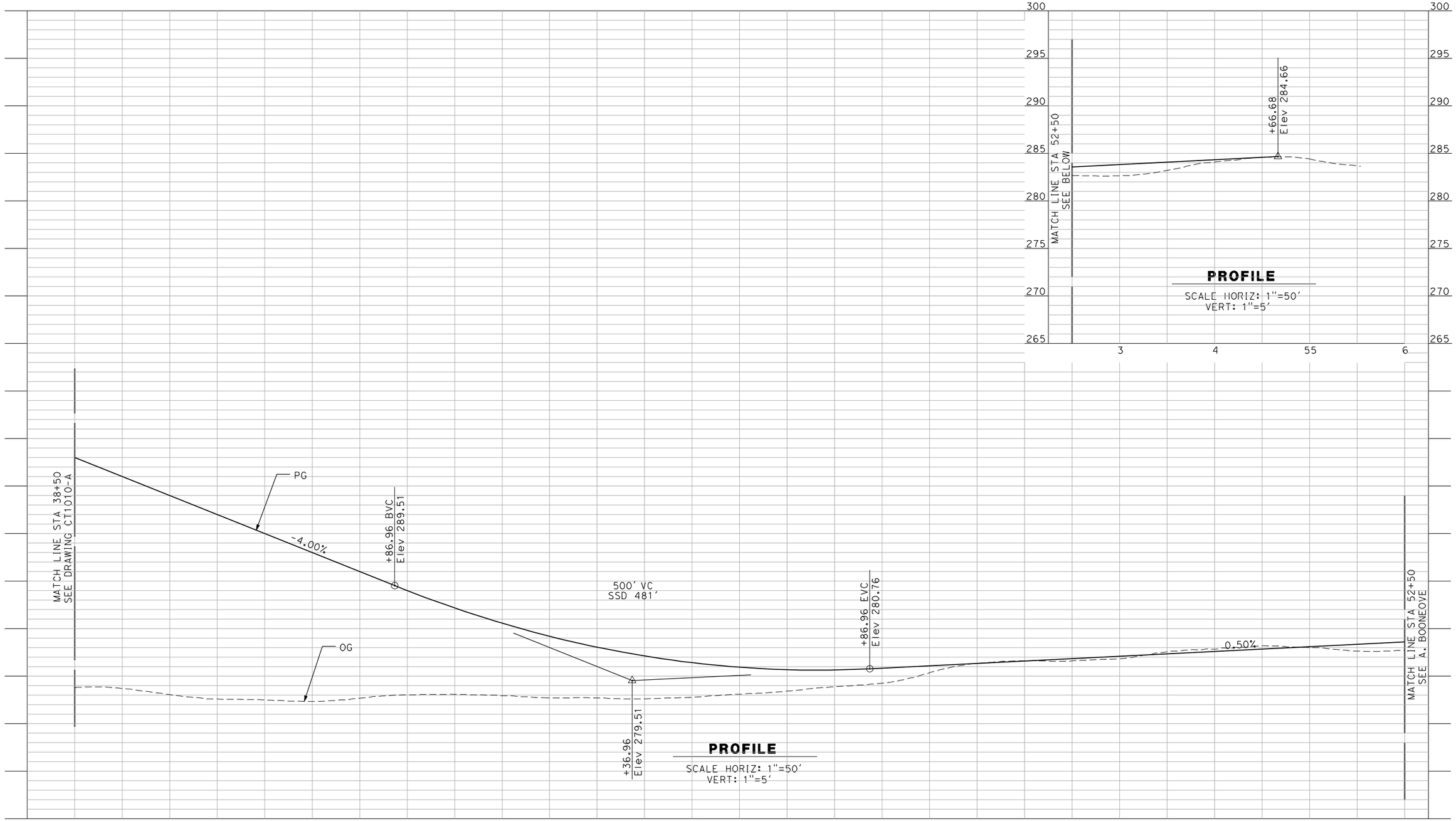
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 12
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1010-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

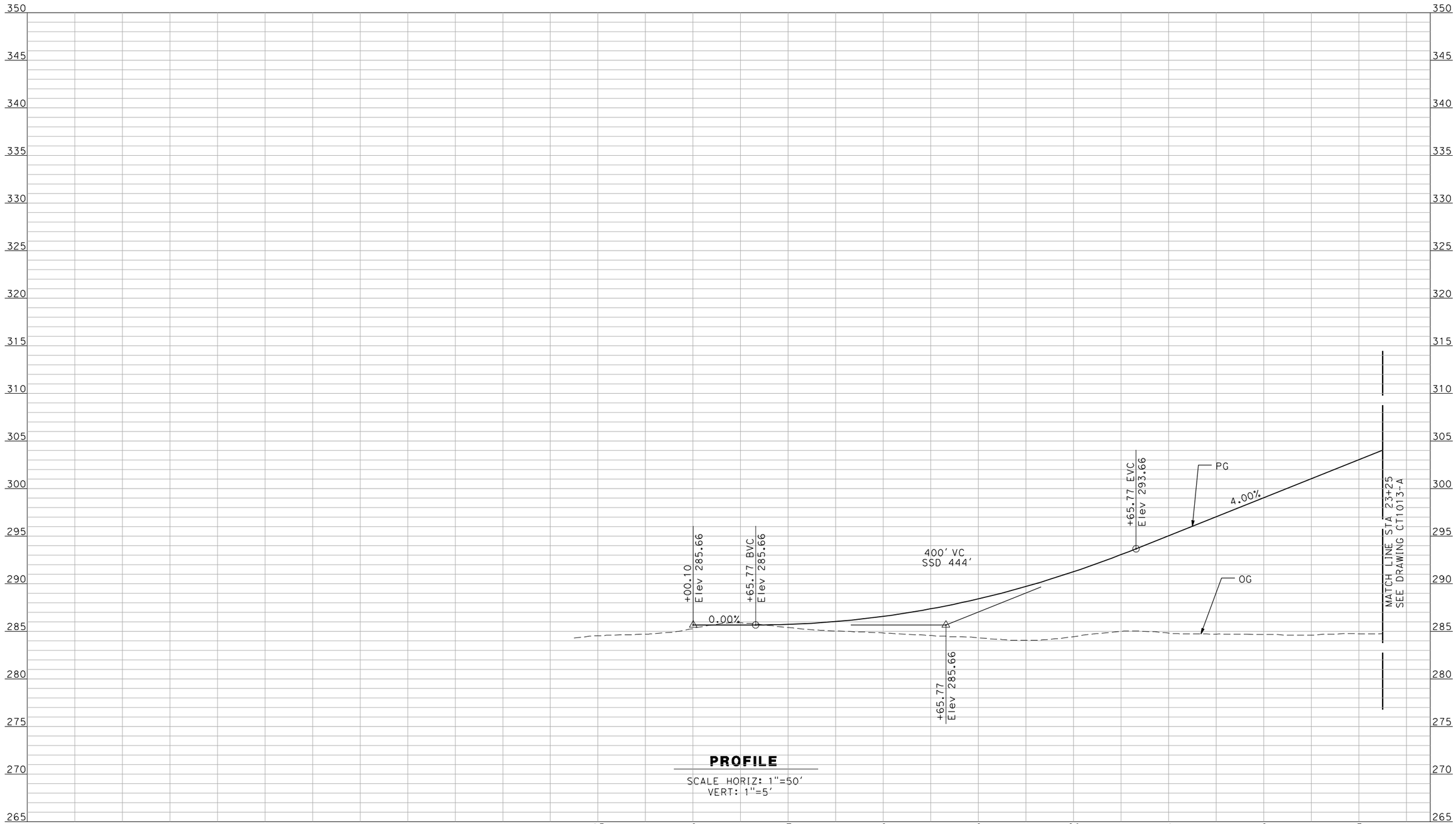
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 12
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1011-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

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VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

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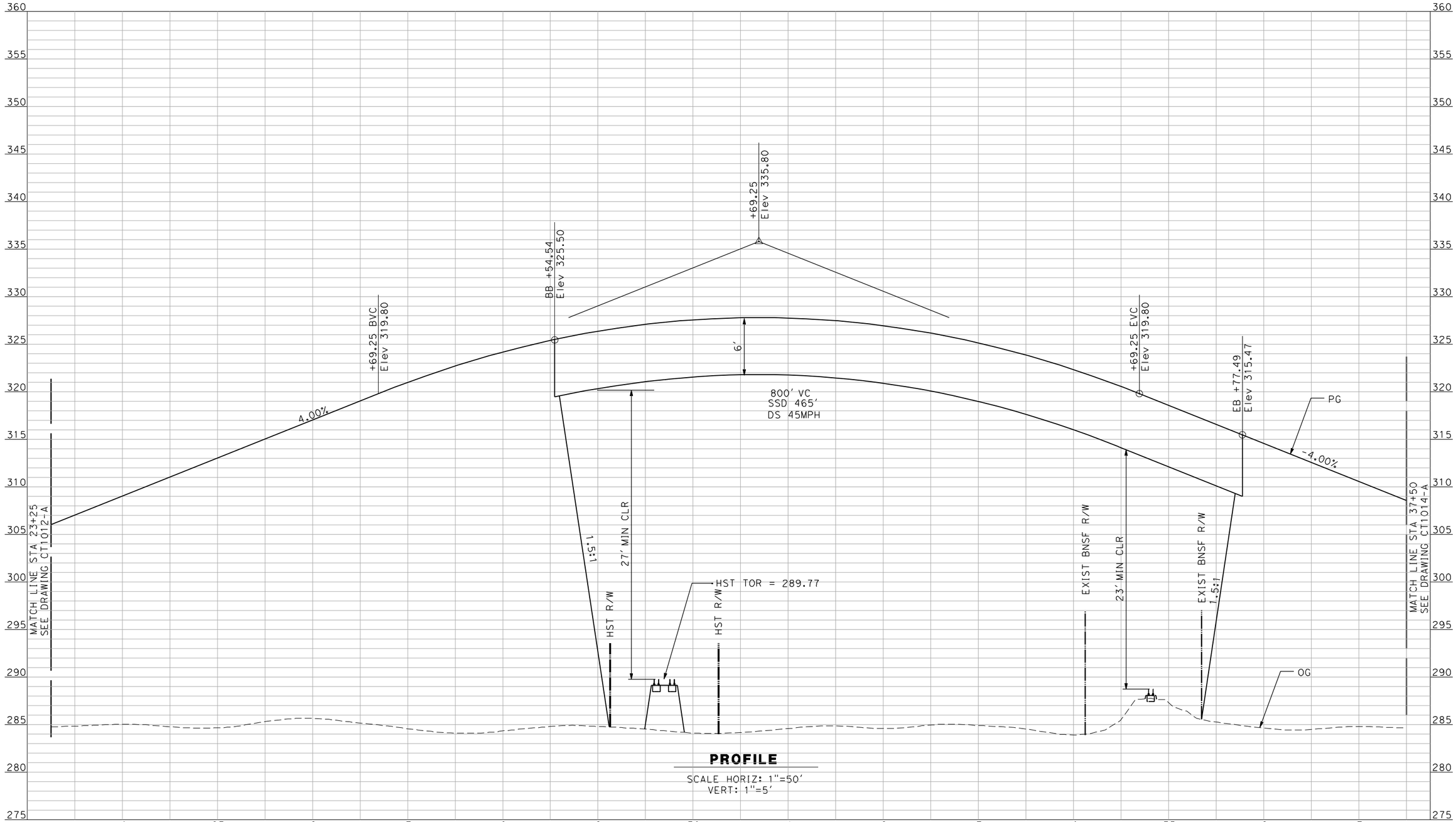
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 13
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1012-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
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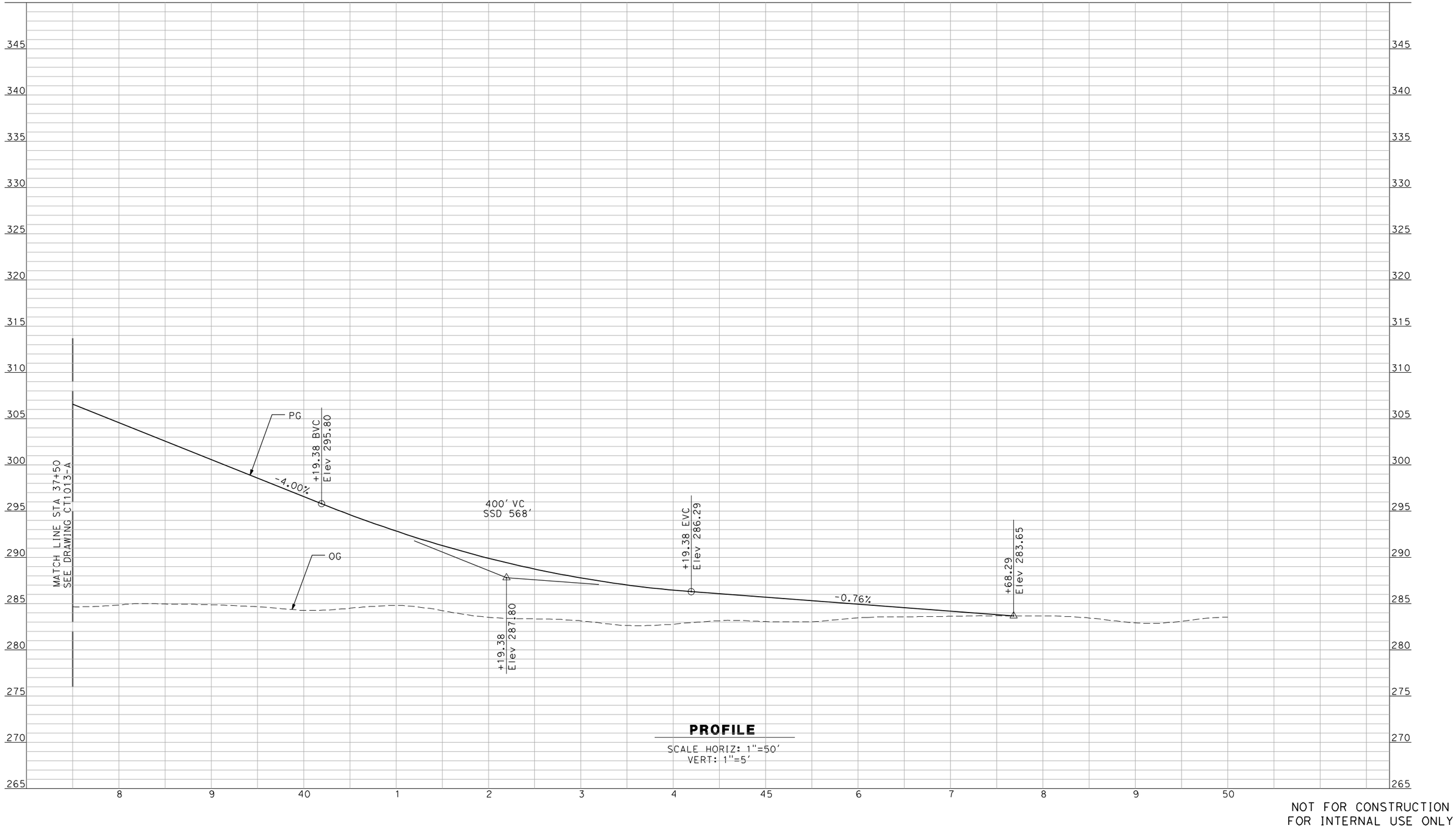
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 13
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1013-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/28/11 | RG | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

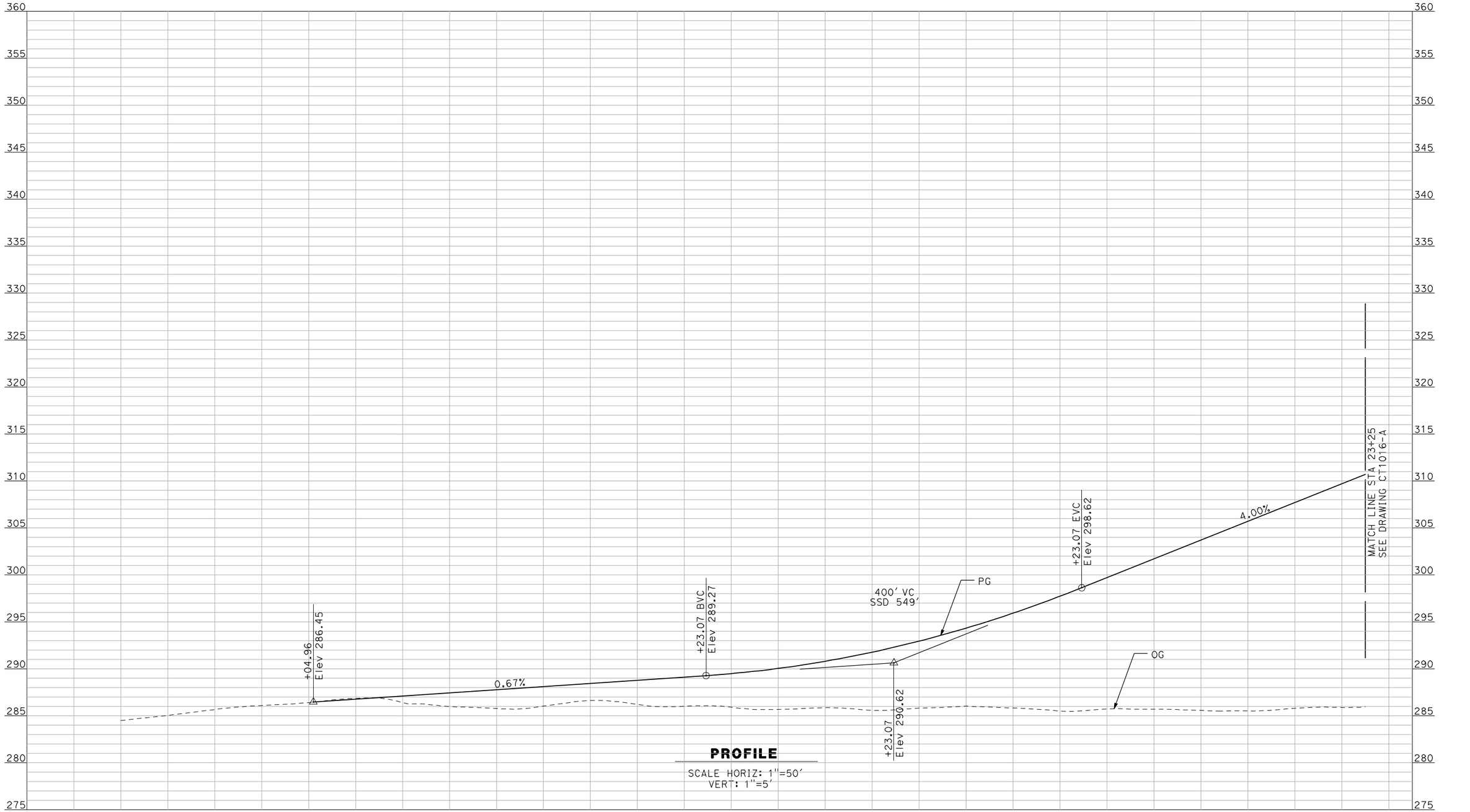
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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 13
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1014-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

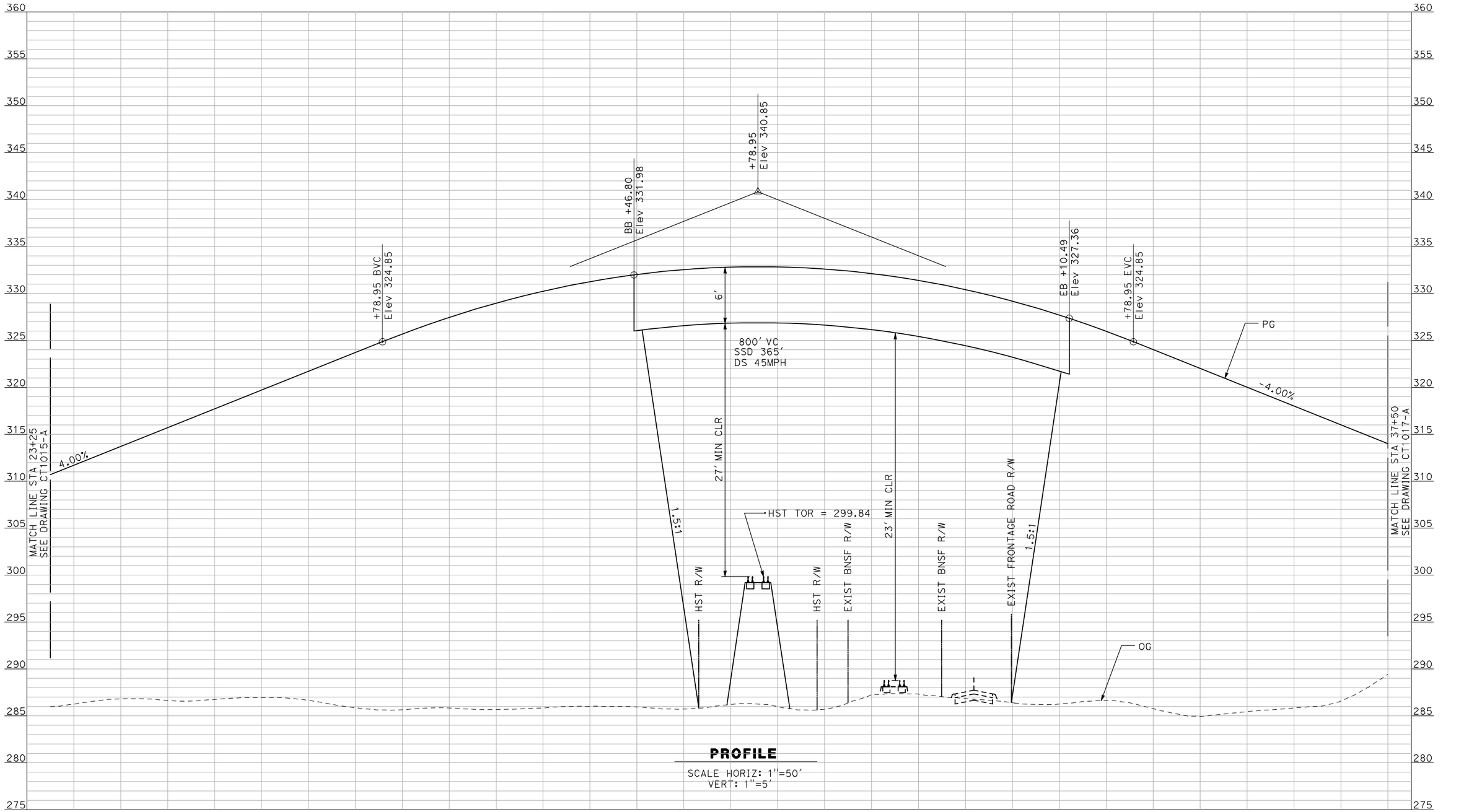
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1015-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

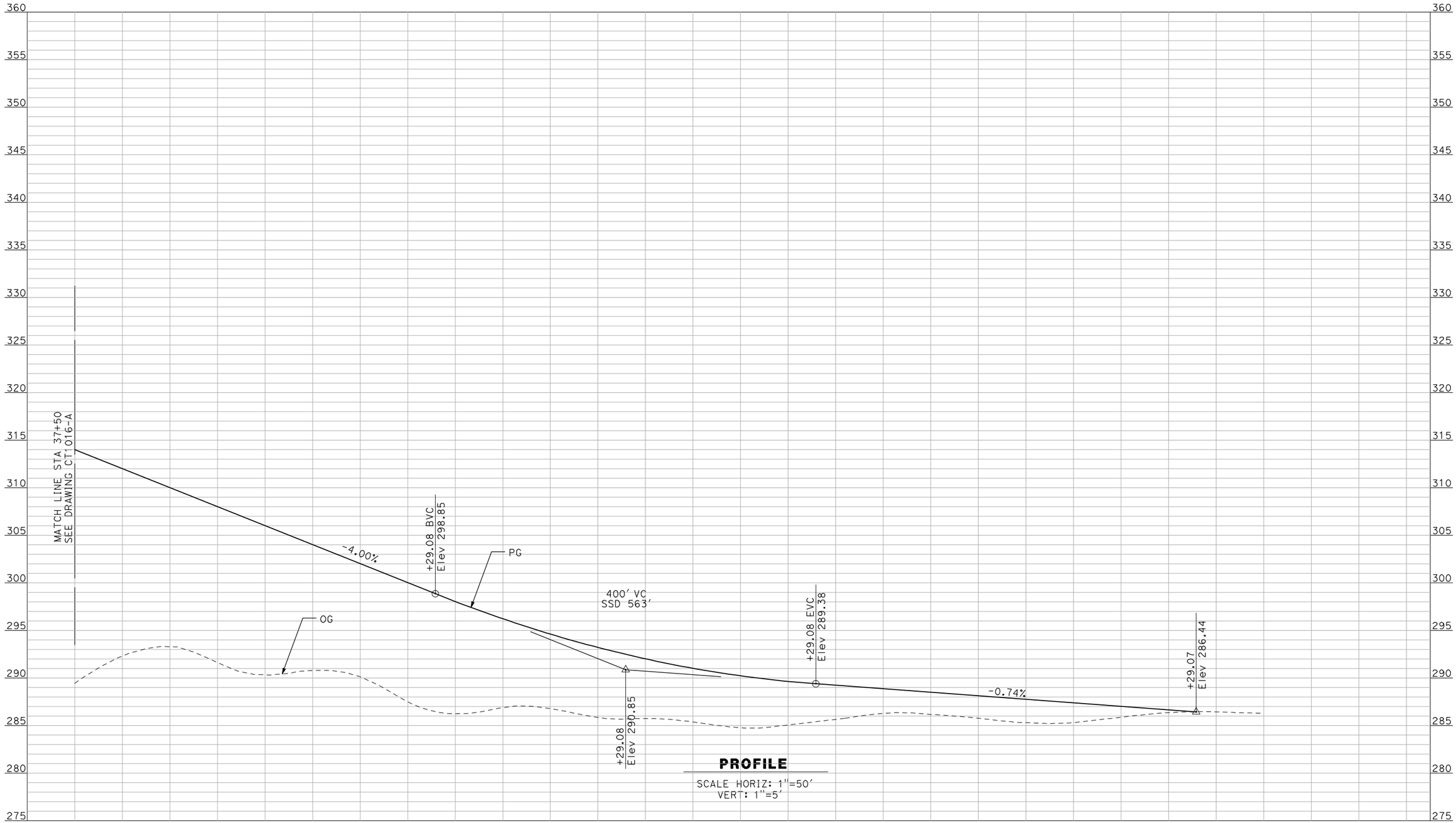
AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1016-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

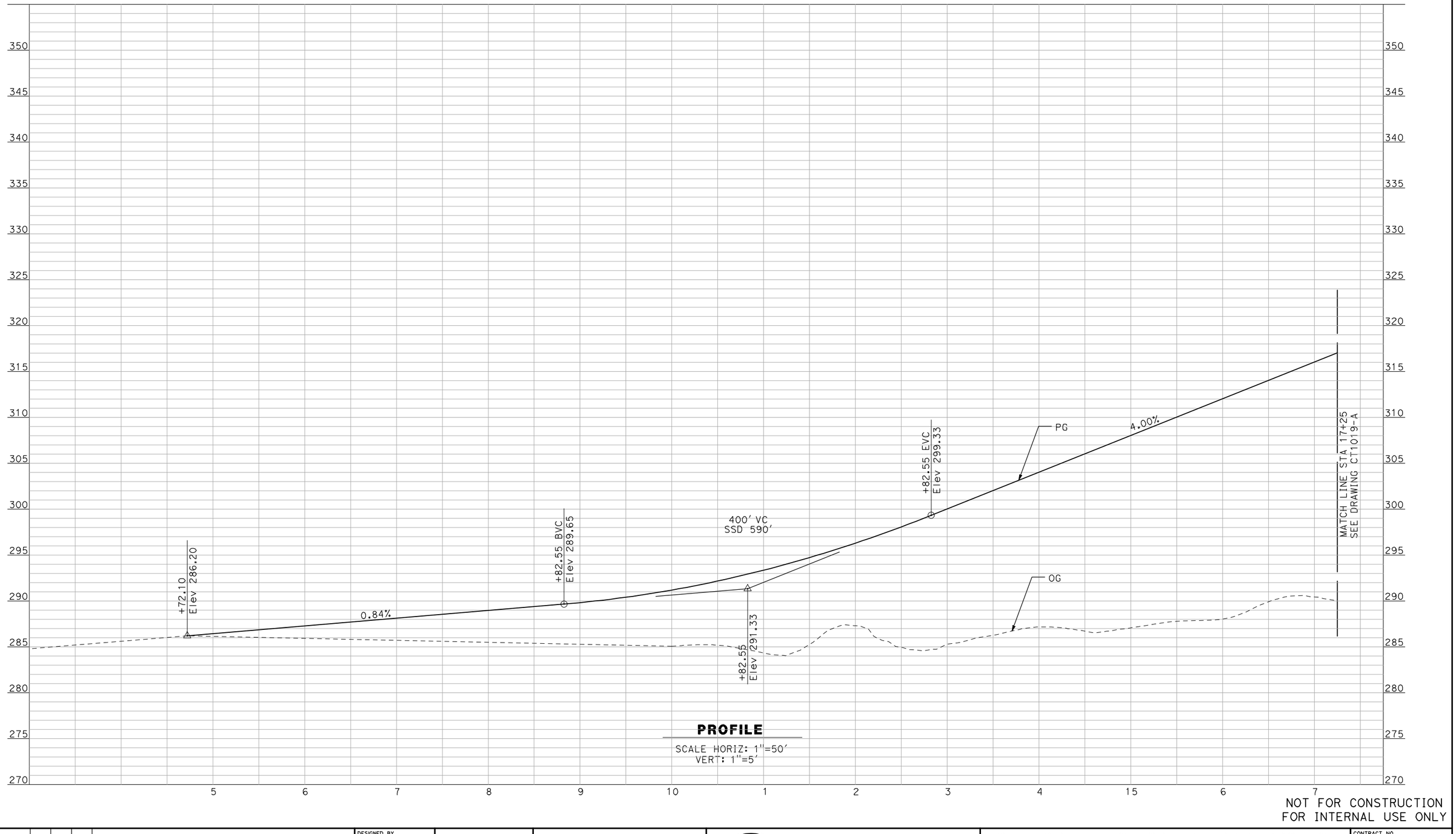
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1017-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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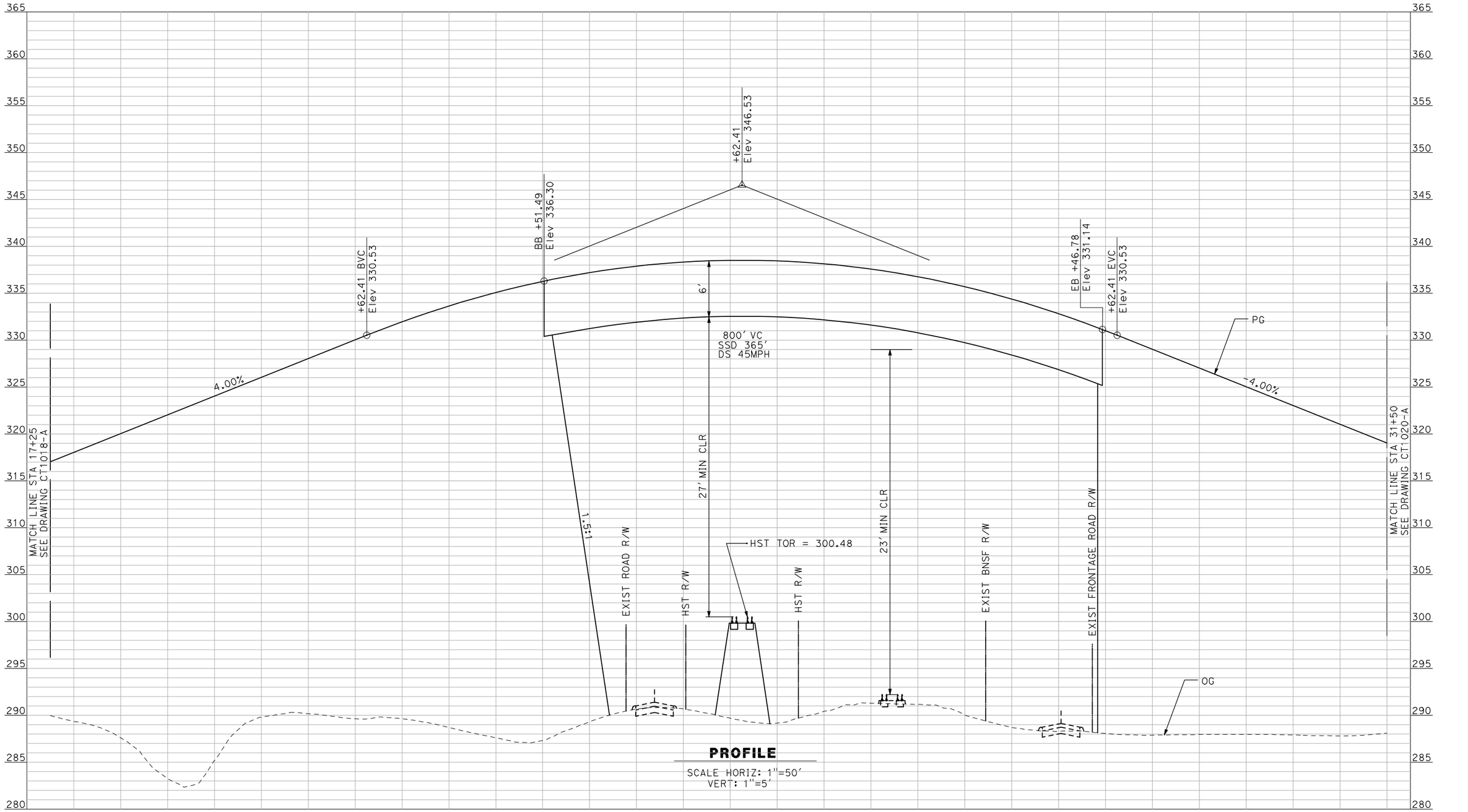
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15 1/2
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1018-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

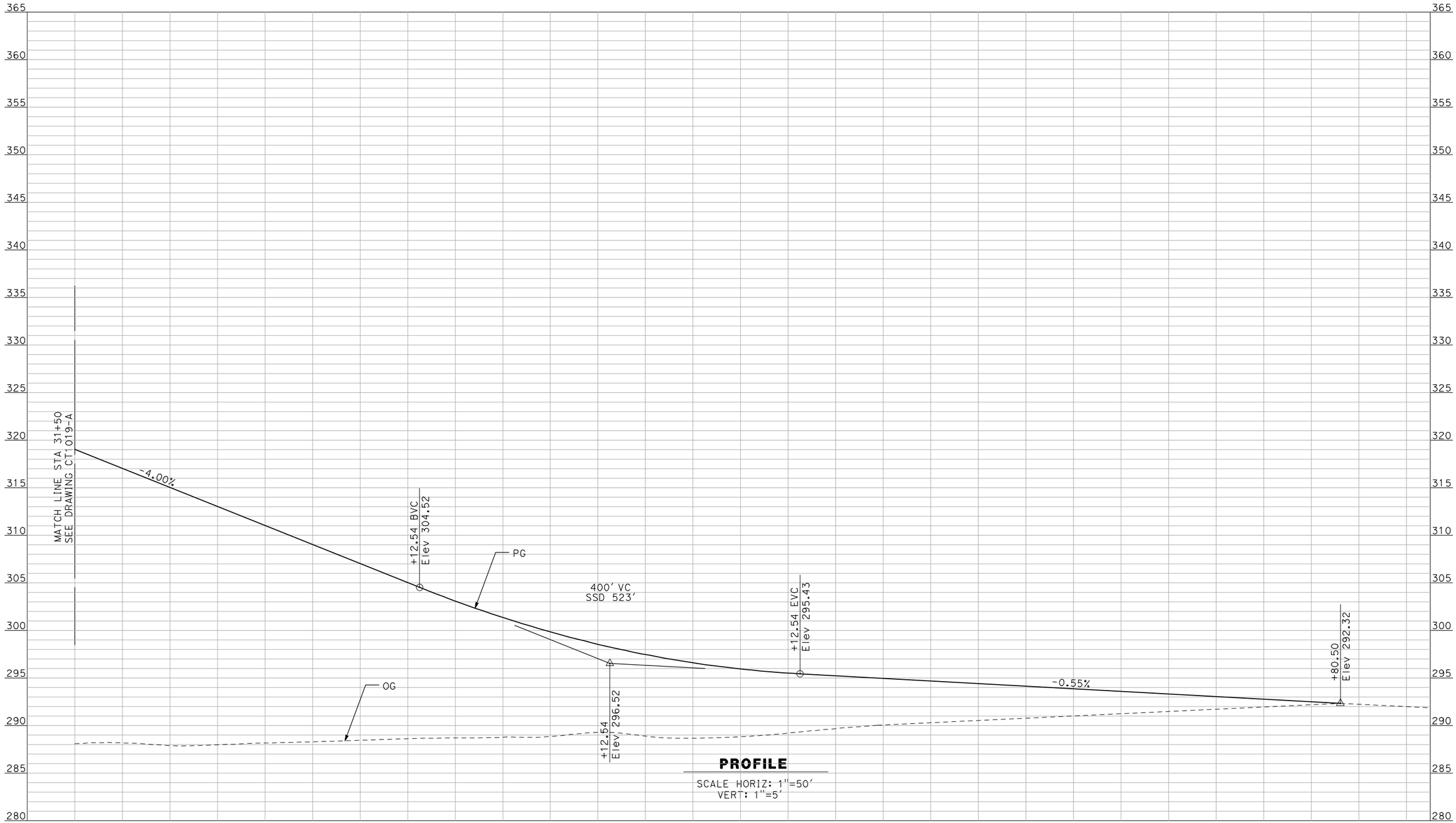
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15 1/2
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1019-A
SCALE AS SHOWN
SHEET NO. ### OF ###


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IN CHARGE: A. BOONE
DATE: 04/29/2011

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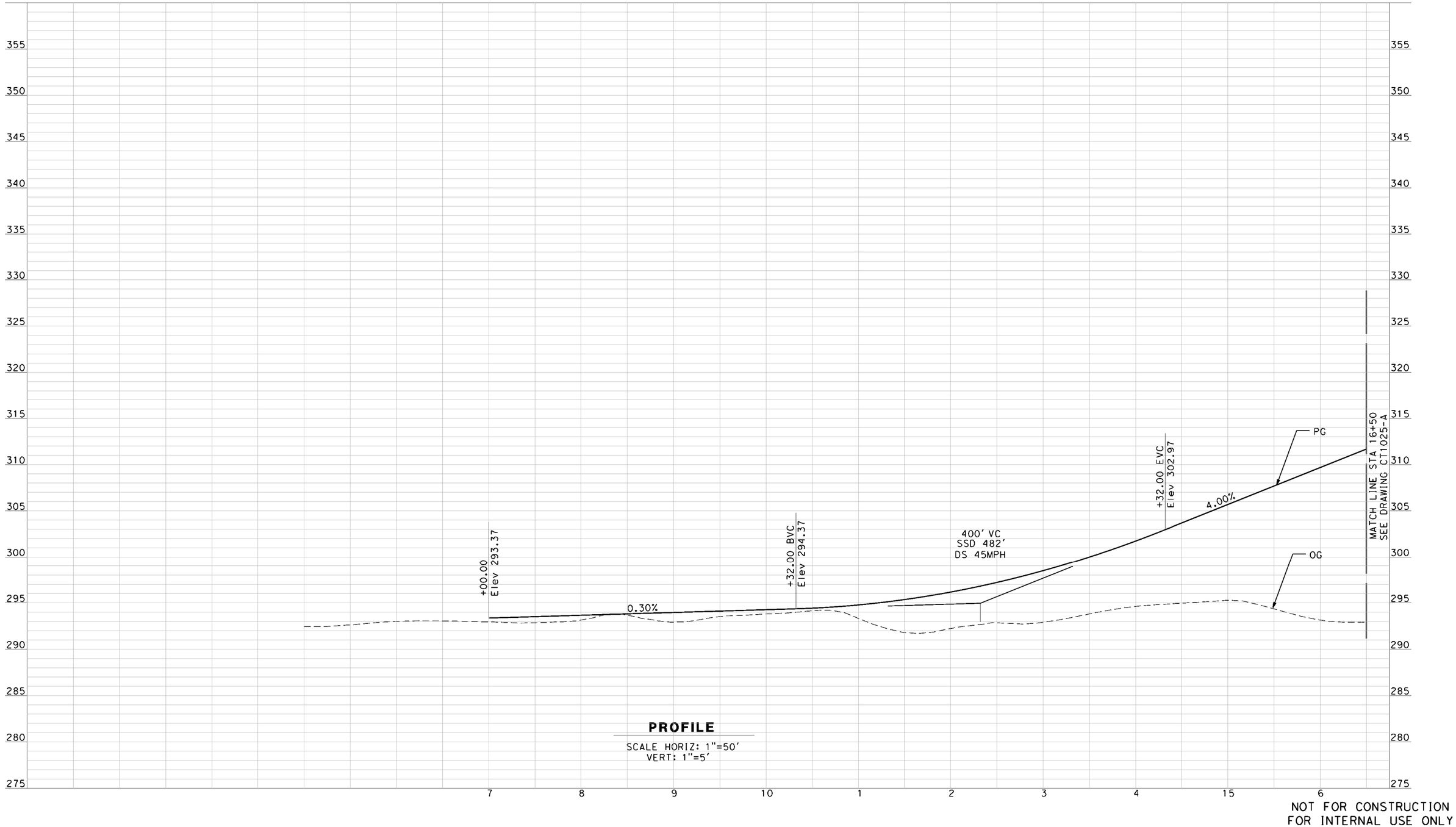
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 15 1/2
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1020-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
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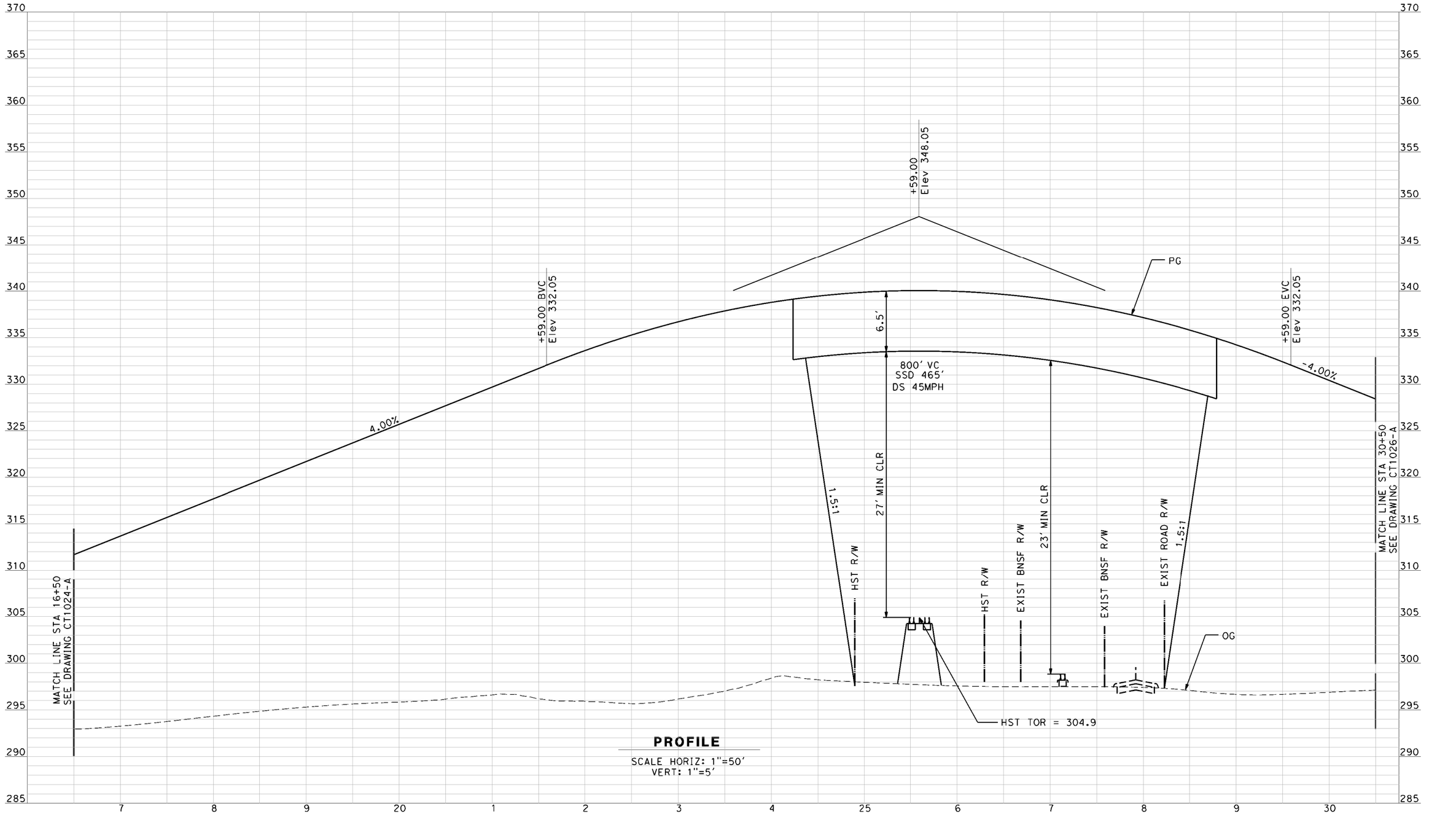
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNFS MAIN LINE - (AVE 21 WYE)
GRADE SEPARATION - AVENUE 17
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1024-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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lros




**PROFILE**

SCALE HORIZ: 1"=50'
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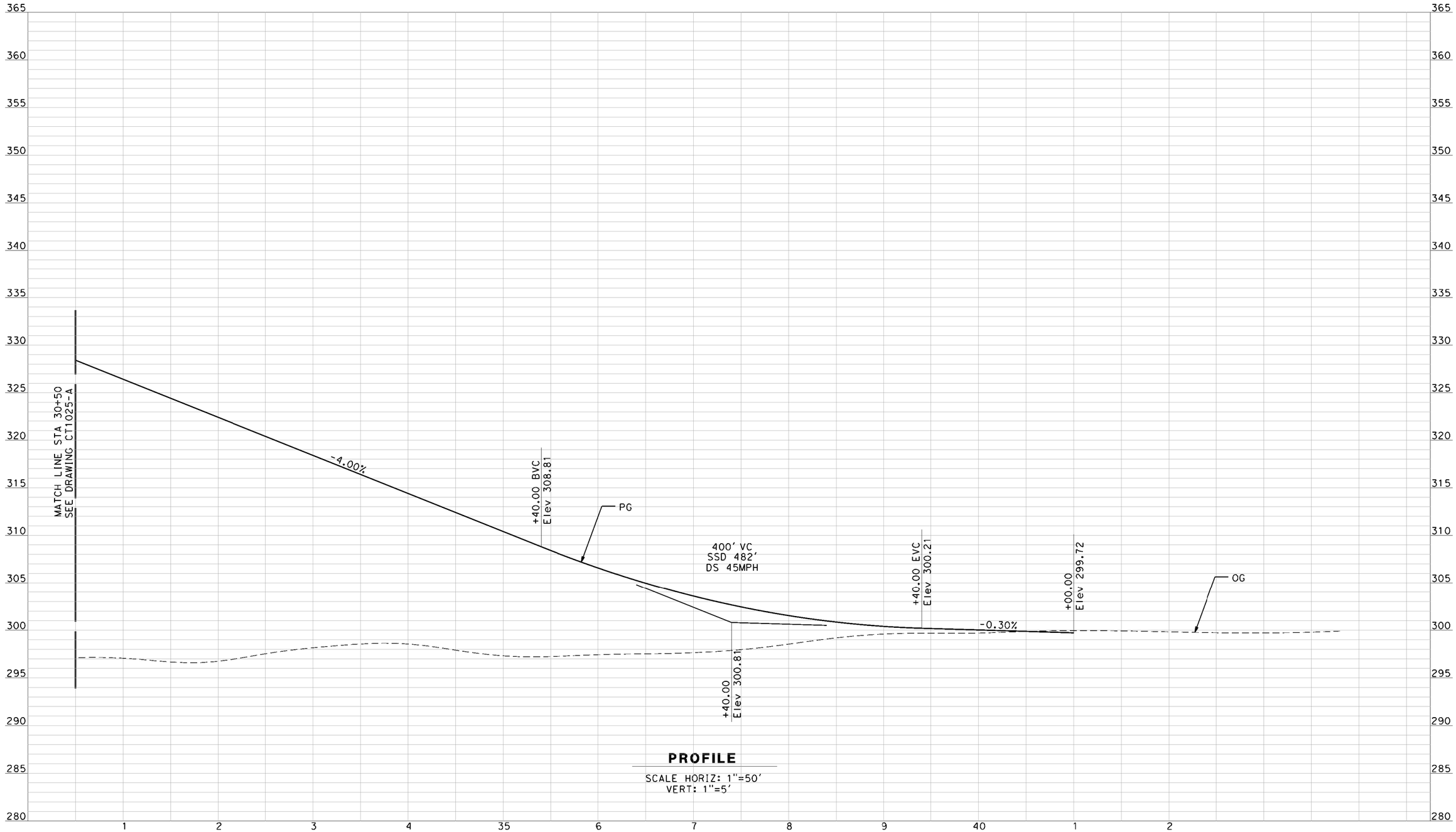
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNFS MAIN LINE - (AVE 21 WYE)
GRADE SEPARATION - AVENUE 17
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1025-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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lros




**PROFILE**

SCALE HORIZ: 1"=50'
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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

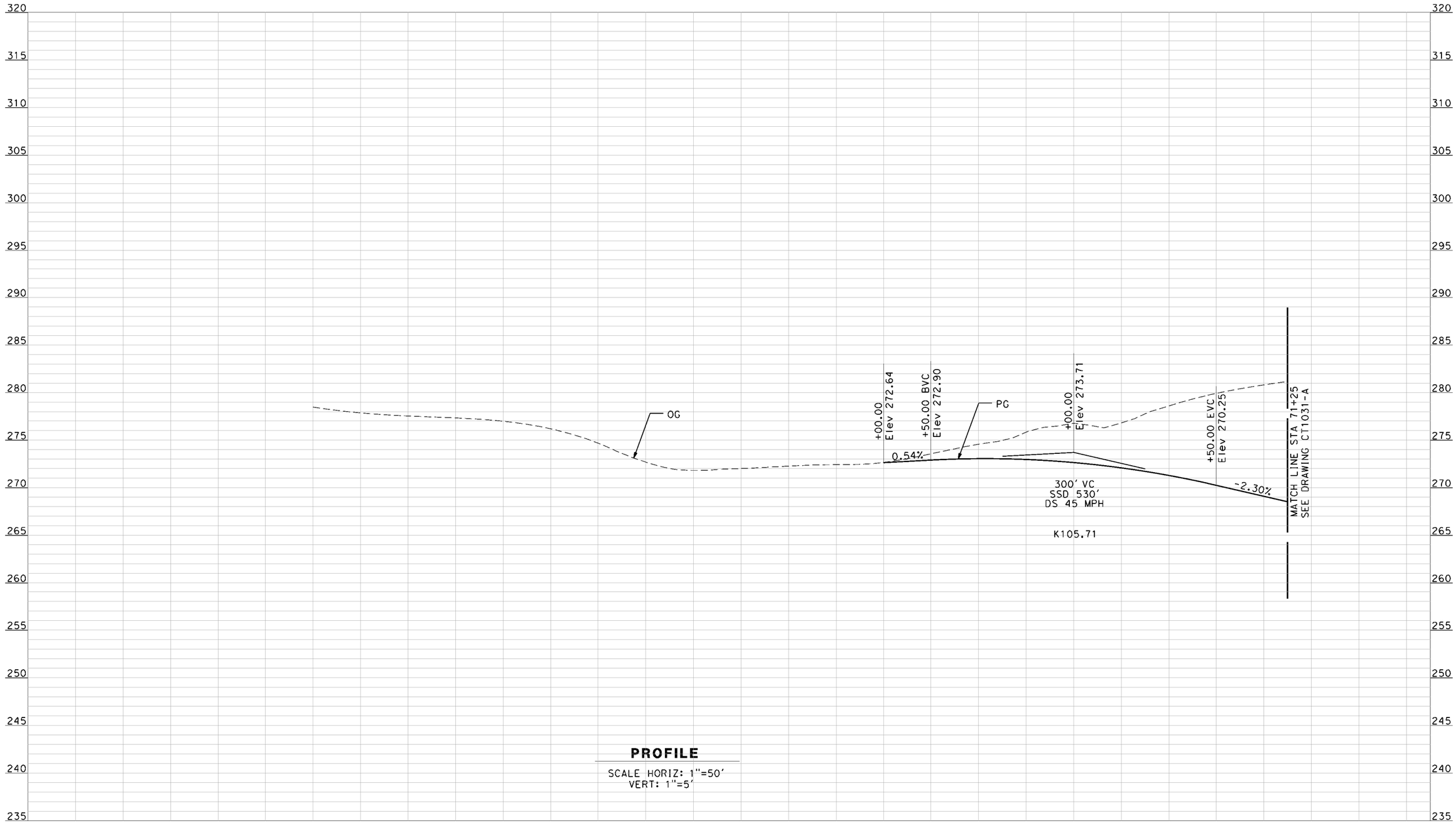
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNFS MAIN LINE - (AVE 21 WYE)
GRADE SEPARATION - AVENUE 17
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. ###
SCALE AS SHOWN
SHEET NO. OF ###

CT1026-A

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**PROFILE**

SCALE HORIZ: 1"=50'
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IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
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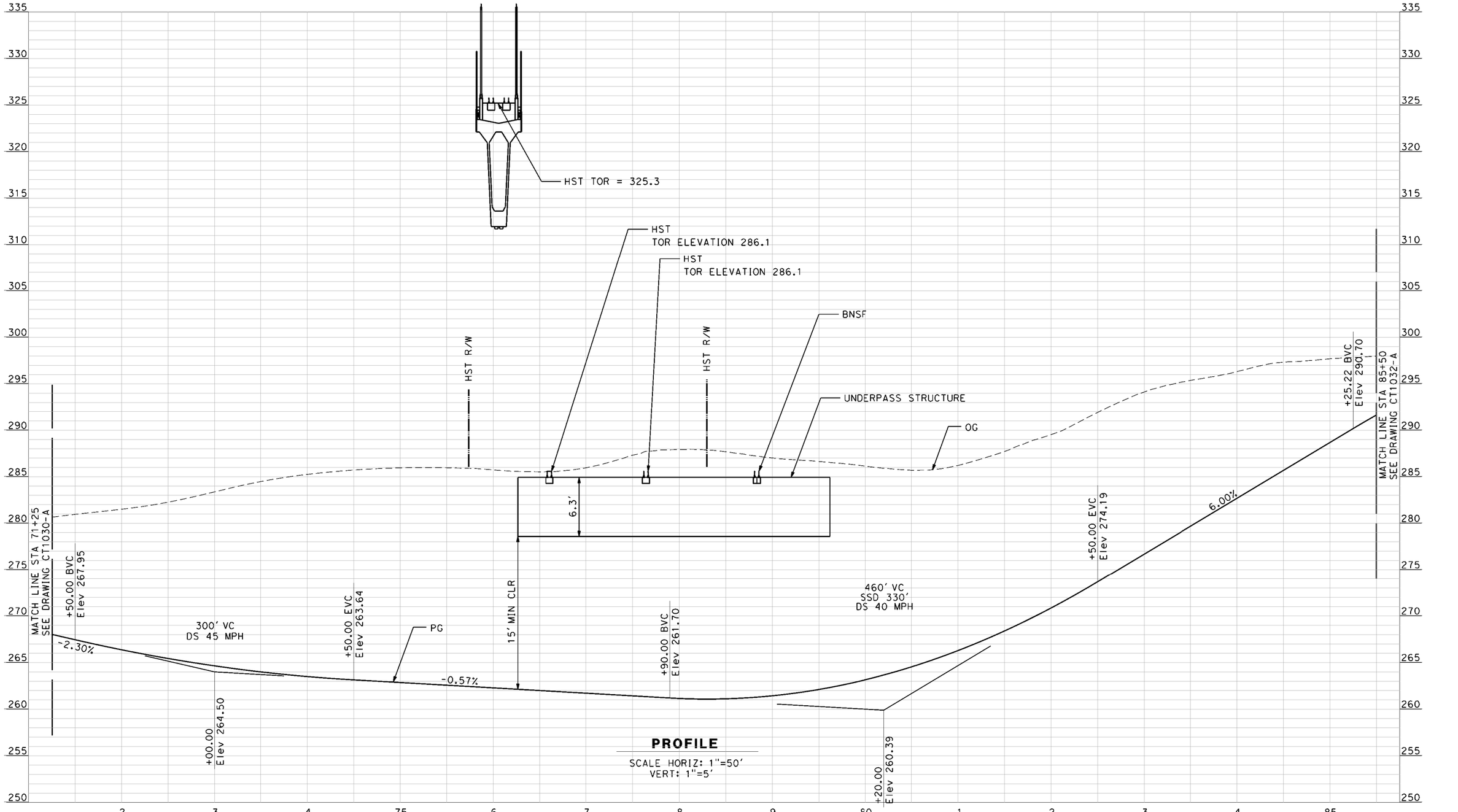
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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - (AVE 21 WYE)
UNDERPASS - ROAD 26
PROFILE
SHEET 1 OF 3 ###

CONTRACT NO. HSR06-007
DRAWING NO. CT1030-A
SCALE AS SHOWN
SHEET NO. OF ###

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**PROFILE**

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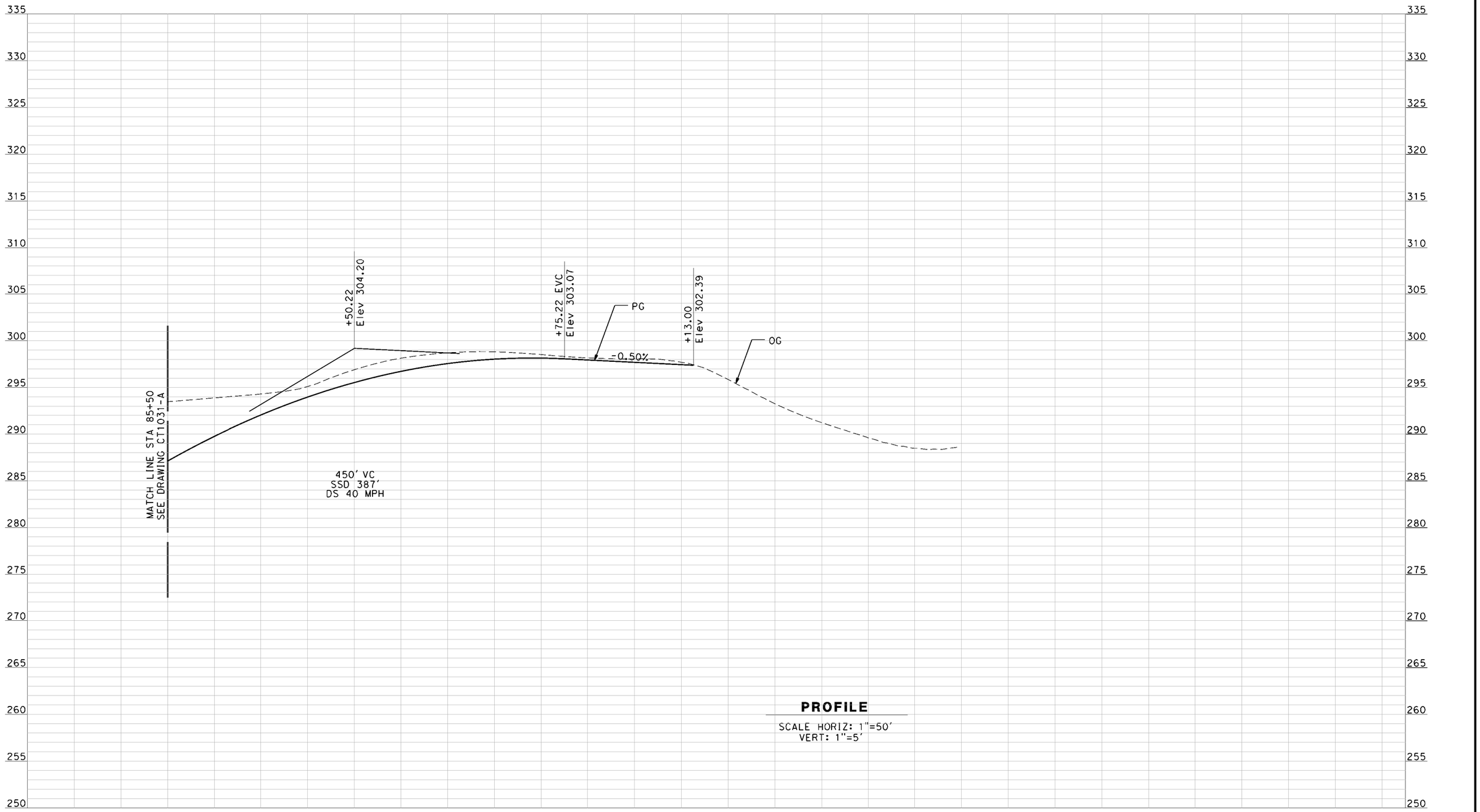
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - (AVE 21 WYE)
UNDERPASS - ROAD 26
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1031-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
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IN CHARGE: A. BOONE
DATE: 06/30/2011

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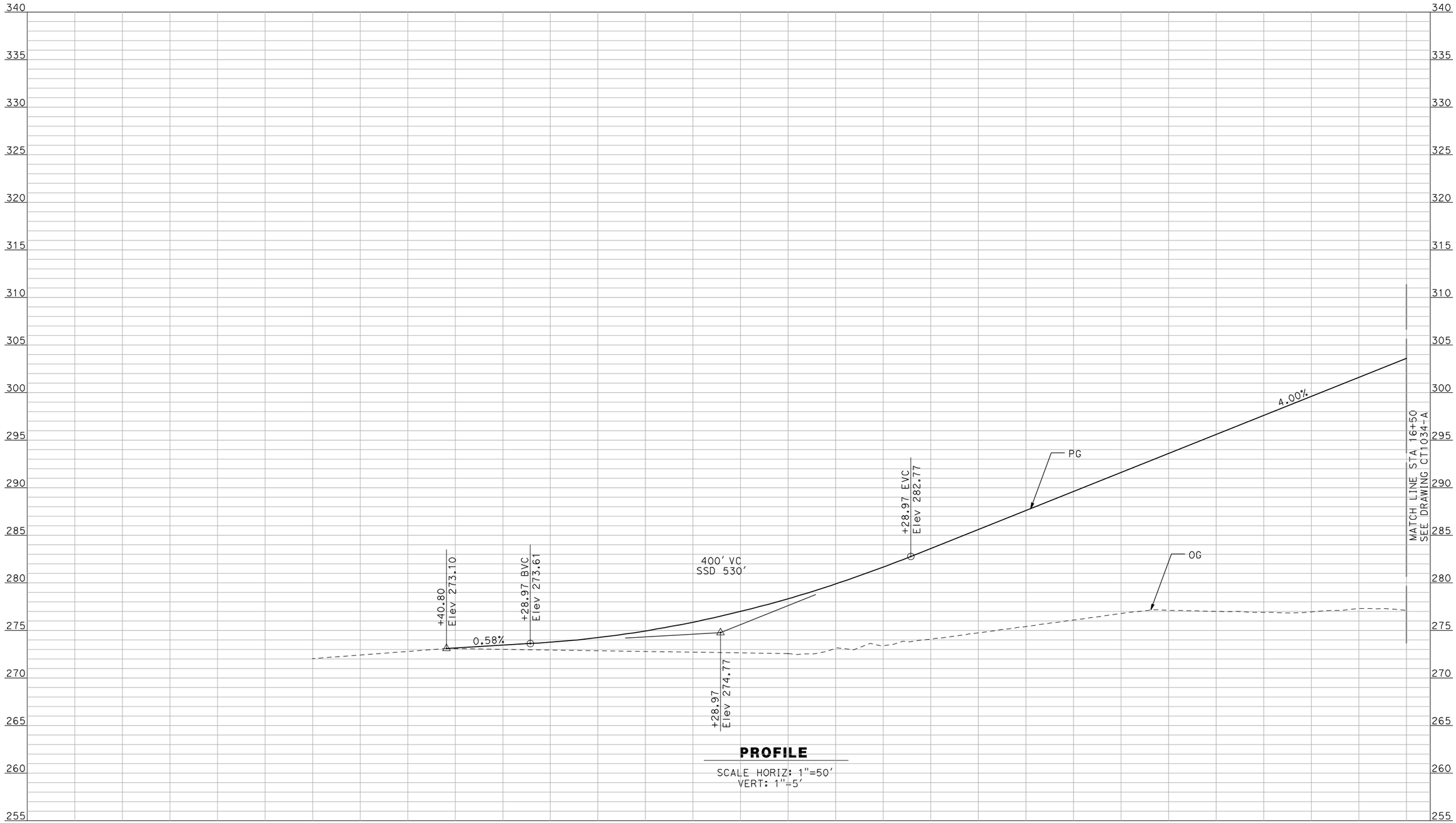
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - (AVE 21 WYE)
UNDERPASS - ROAD 26
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1032-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
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IN CHARGE: A. BOONE
DATE: 04/29/2011

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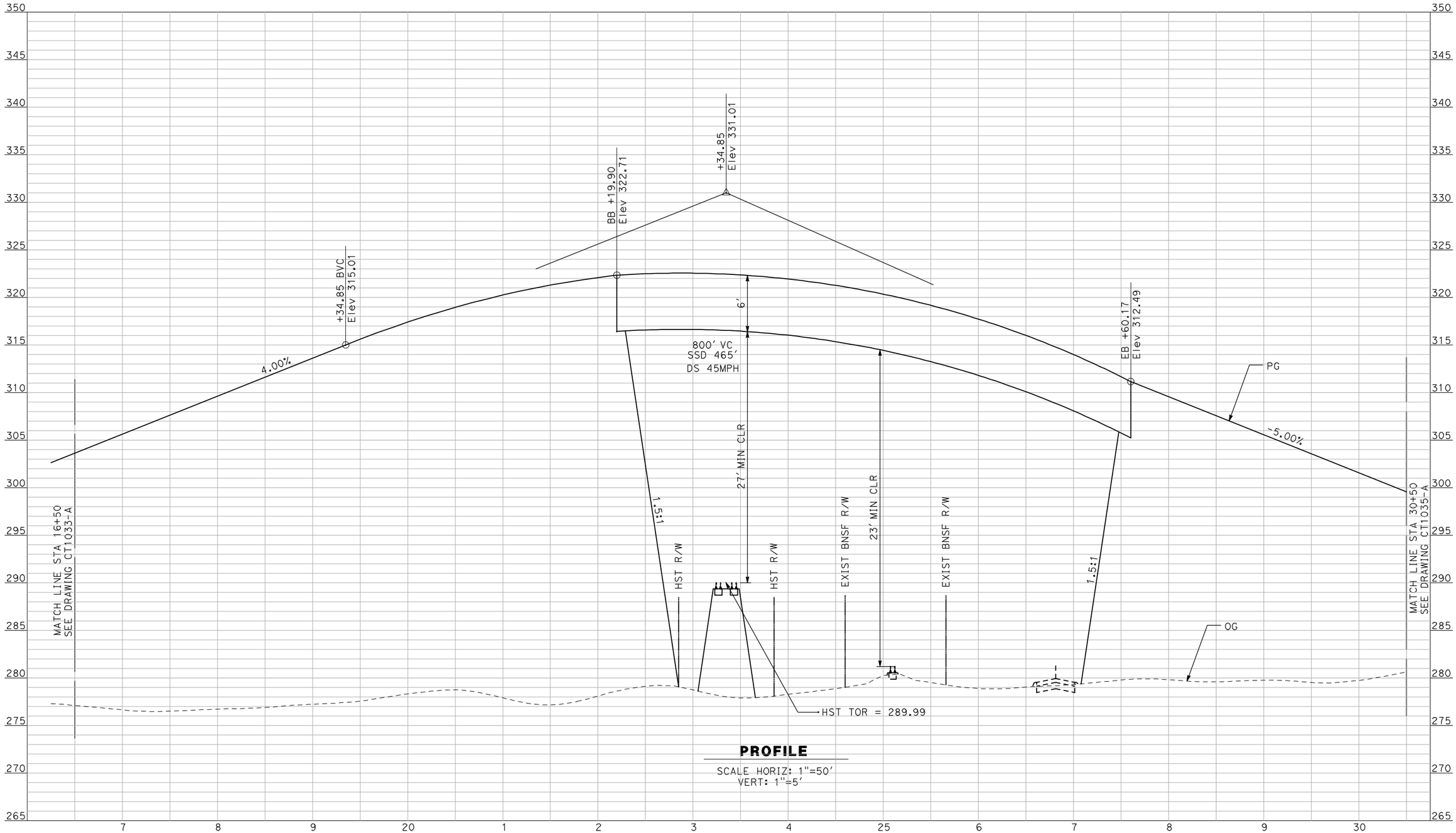
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 21
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1033-A
SCALE AS SHOWN
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**PROFILE**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

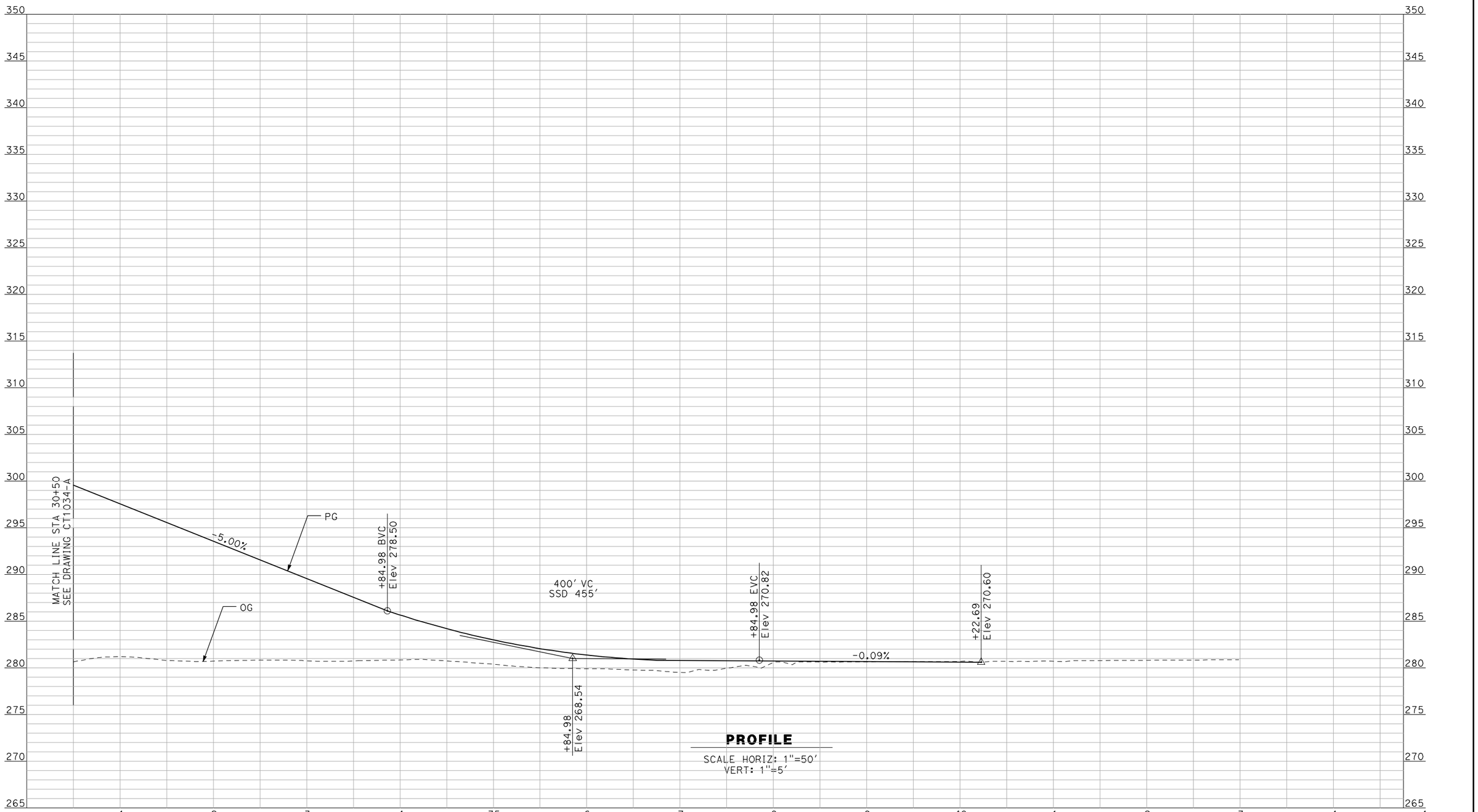
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 21
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1034-A
SCALE AS SHOWN
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**PROFILE**

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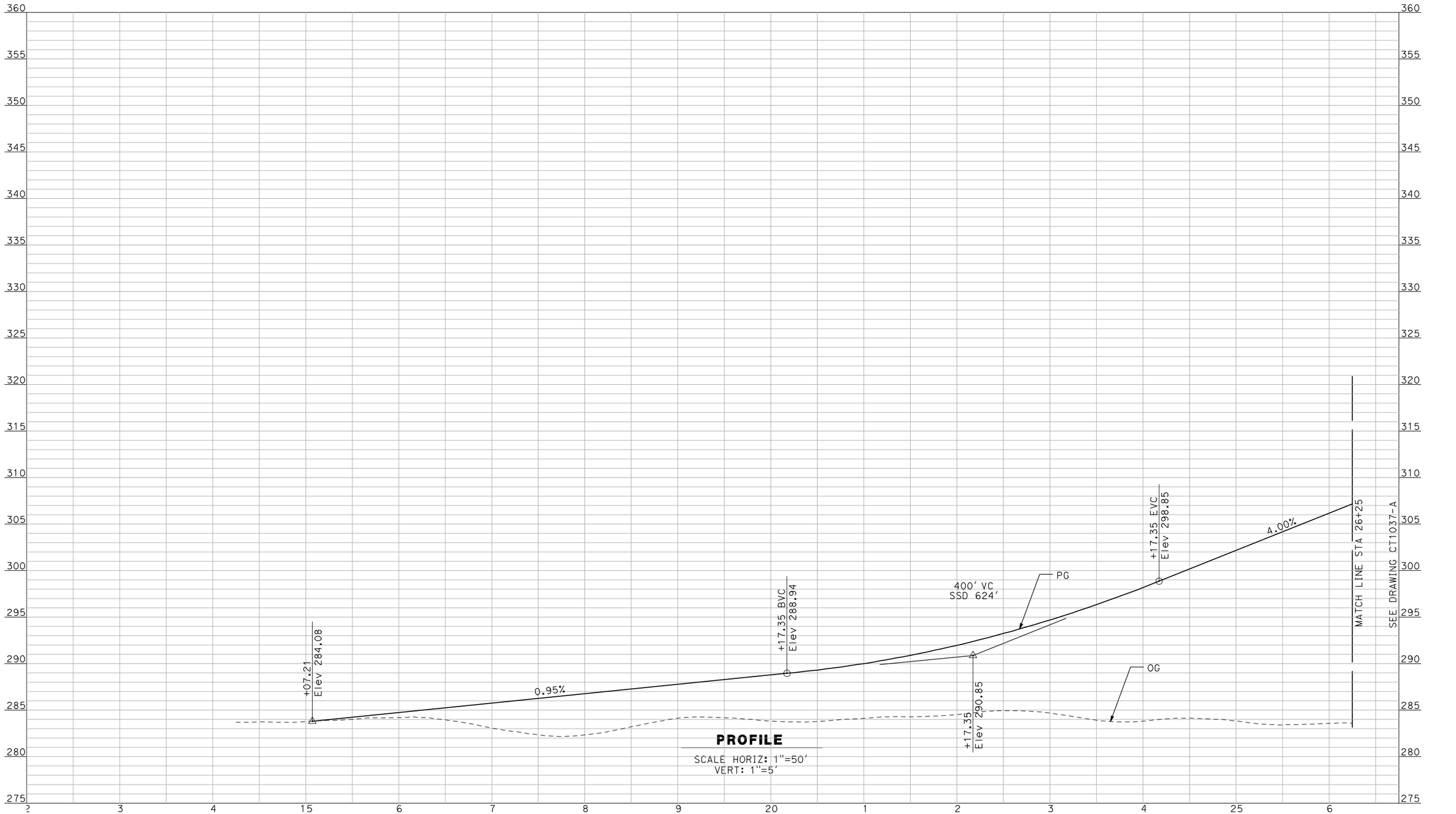
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 21
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1035-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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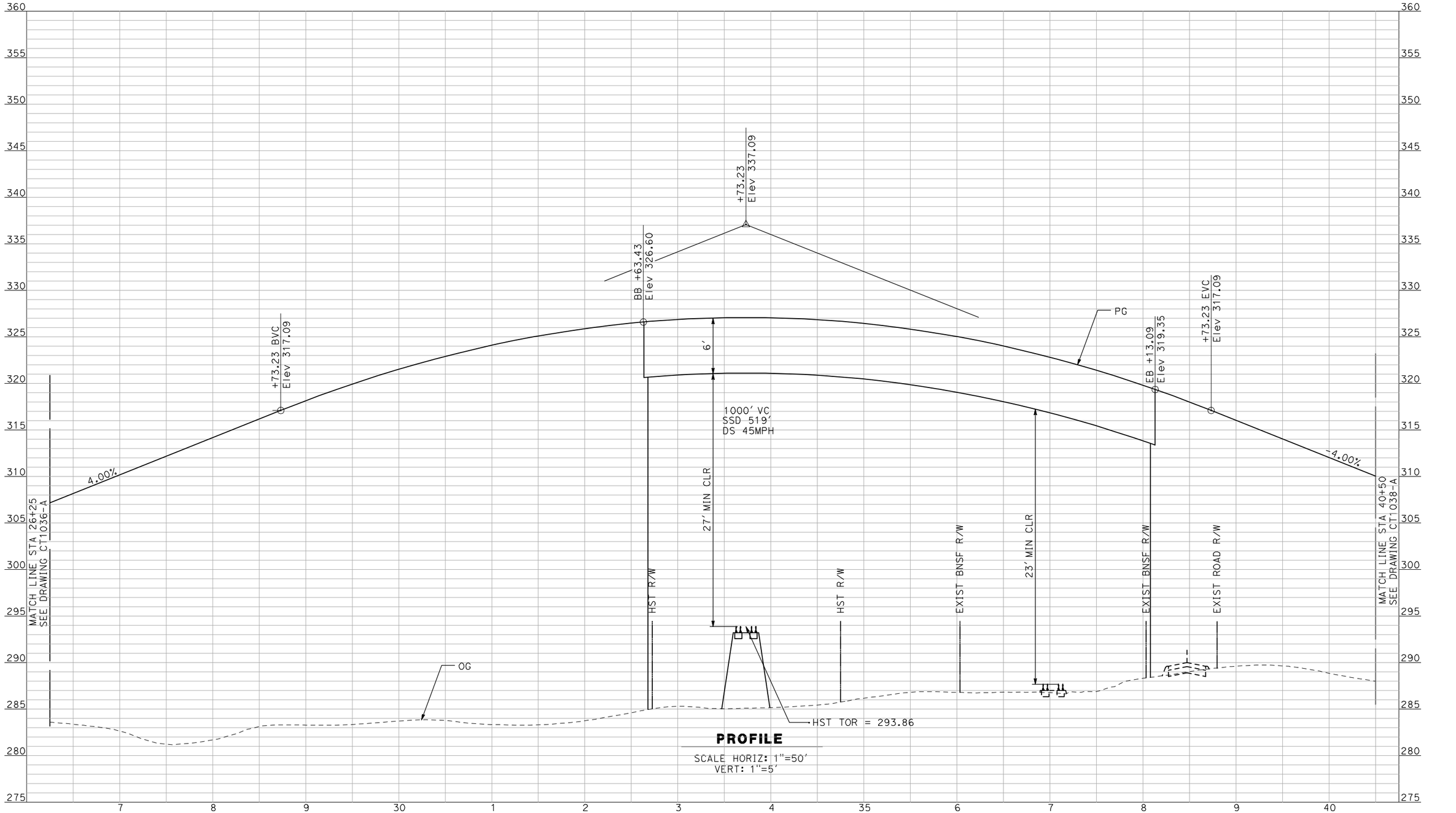
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 24
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1036-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

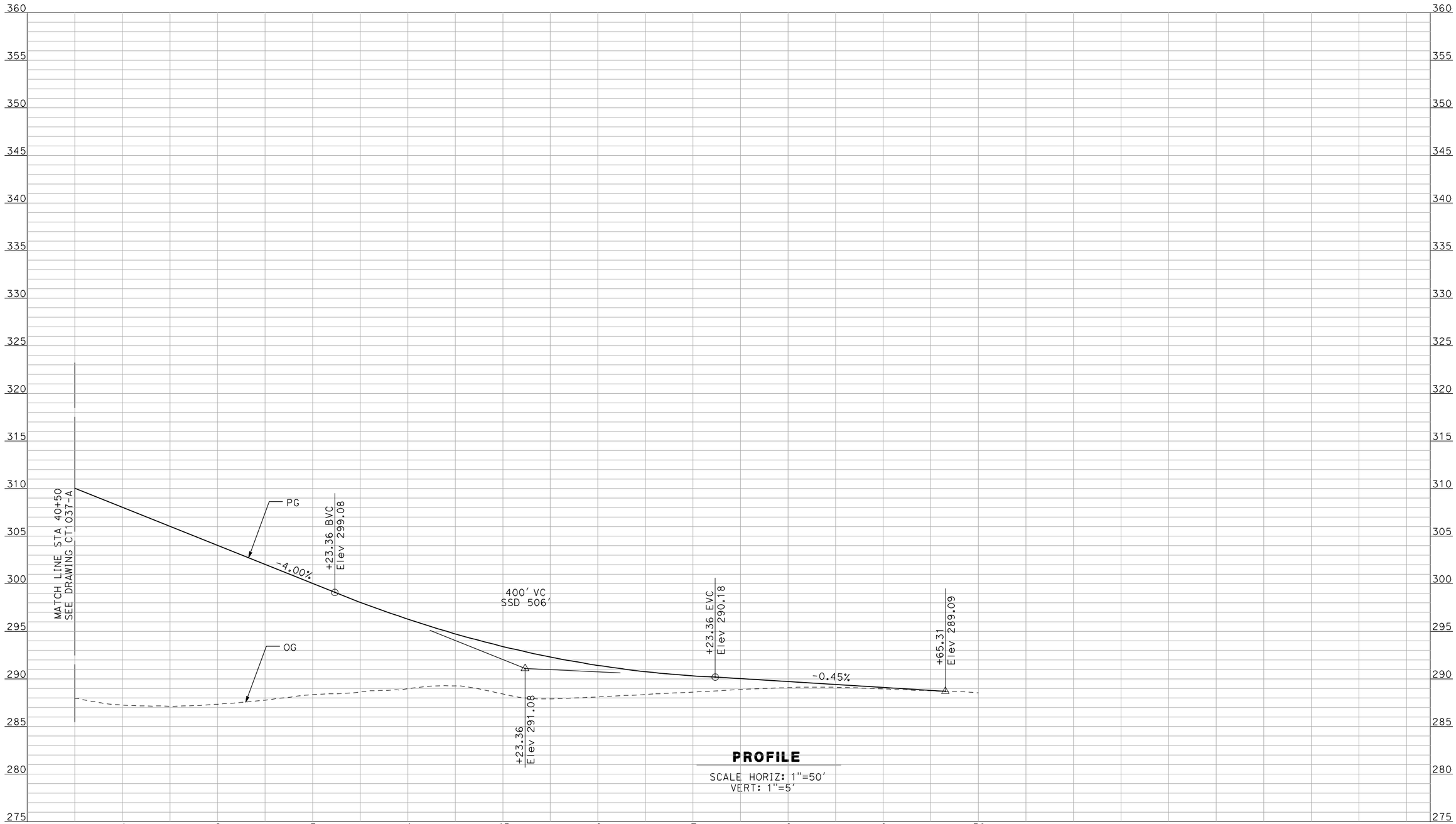
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 24
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1037-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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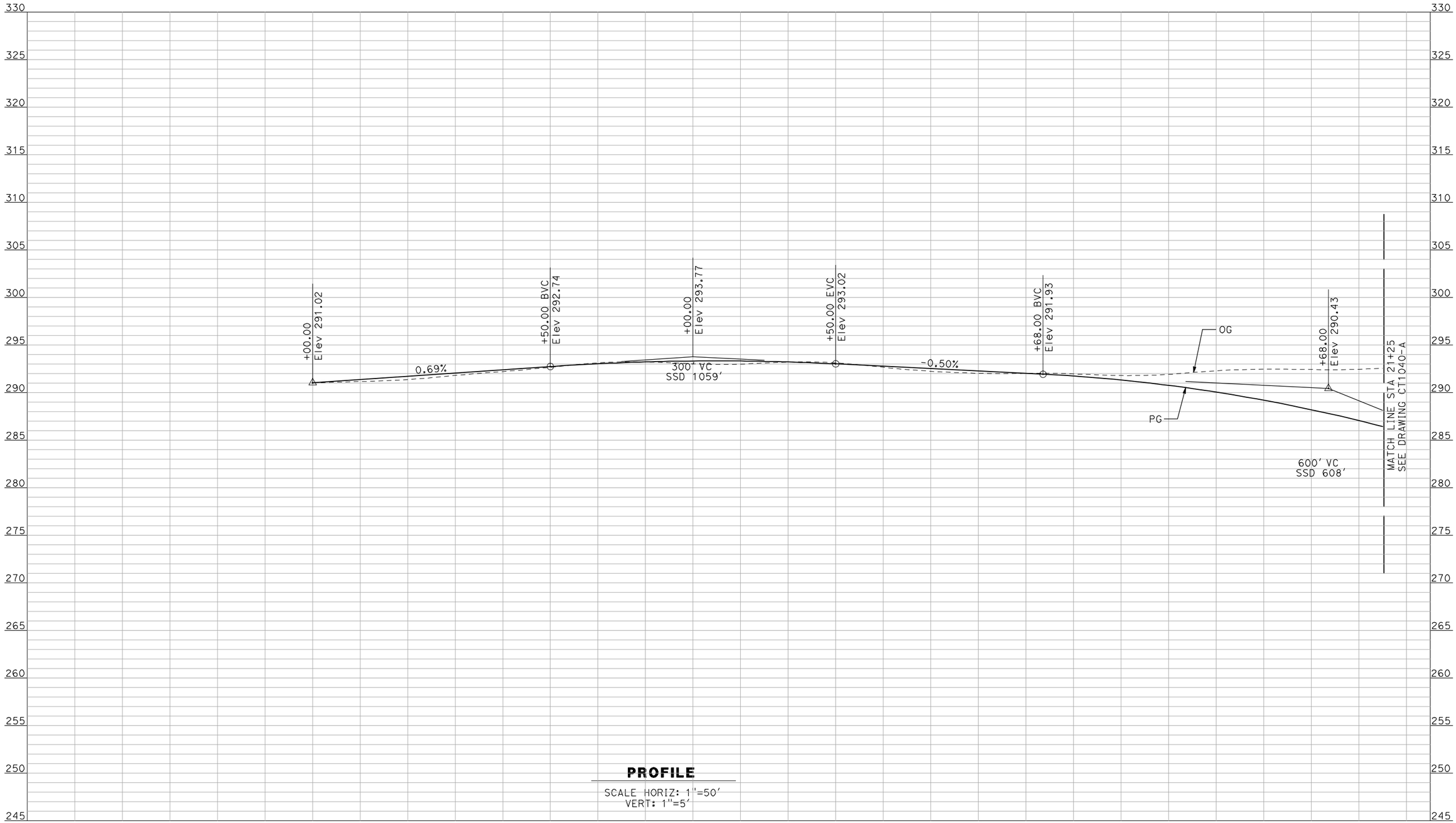
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 24
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1038-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

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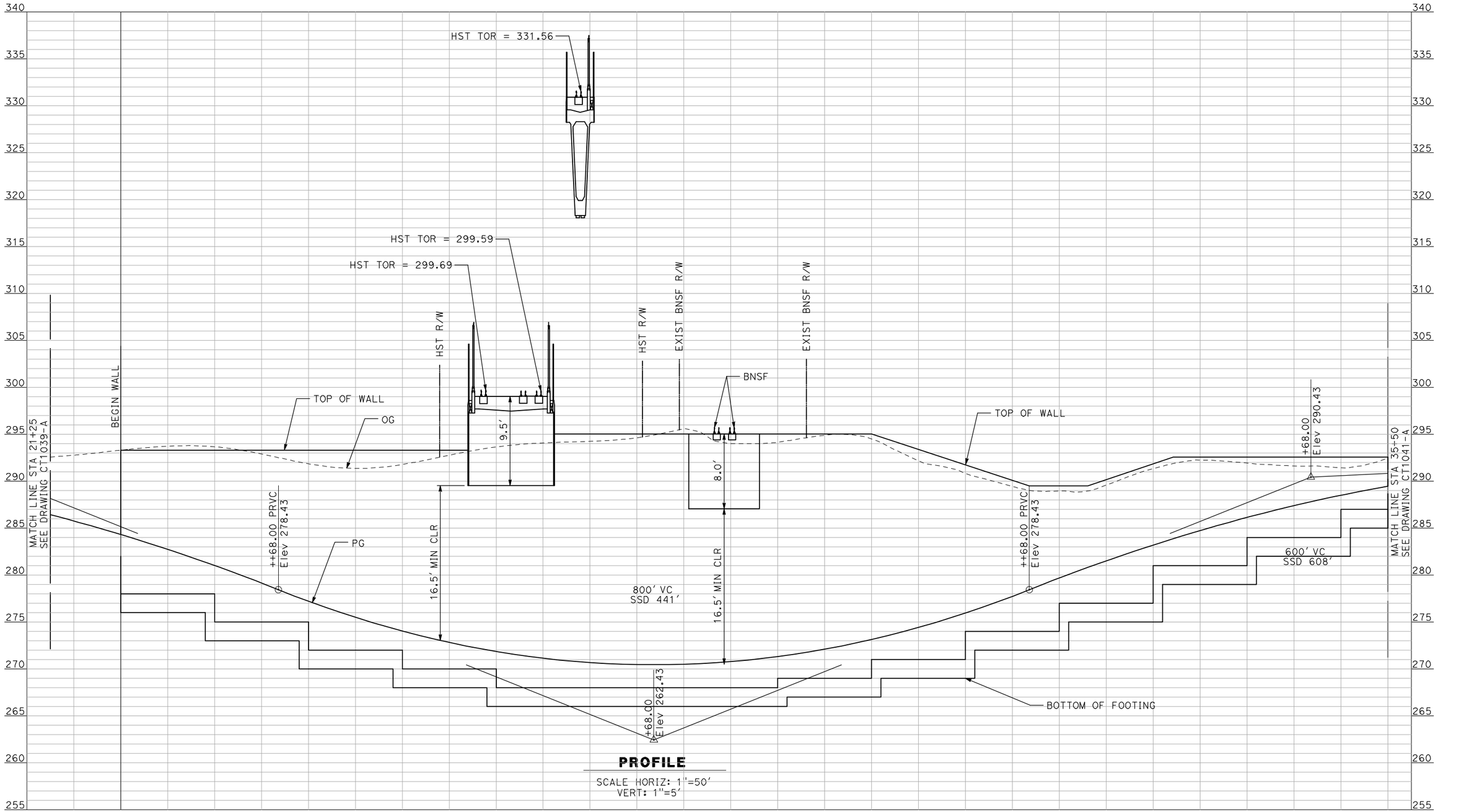
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - AVENUE 24
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1039-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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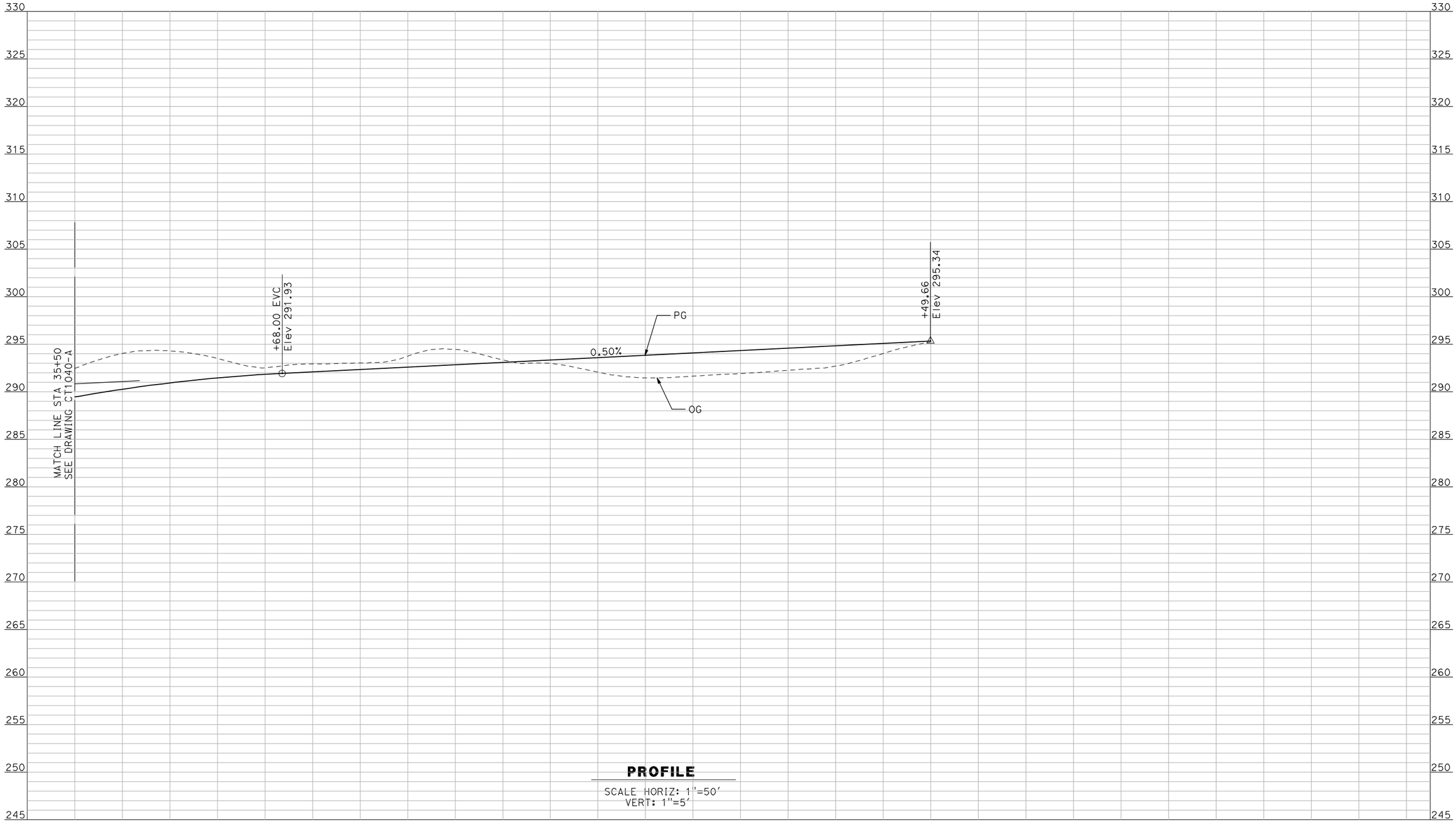
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - AVENUE 24
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1040-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|
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DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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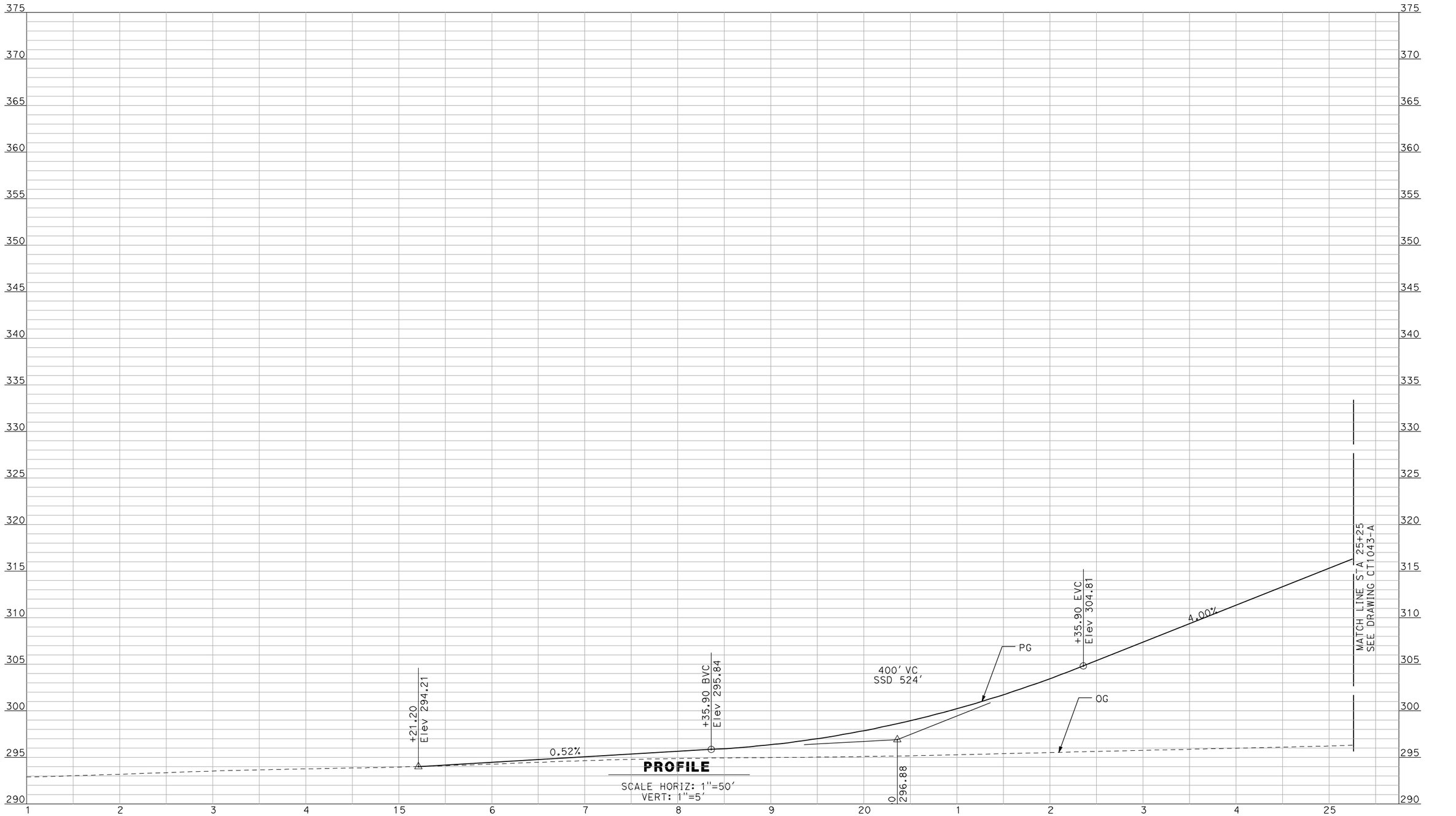
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - AVENUE 24
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1041-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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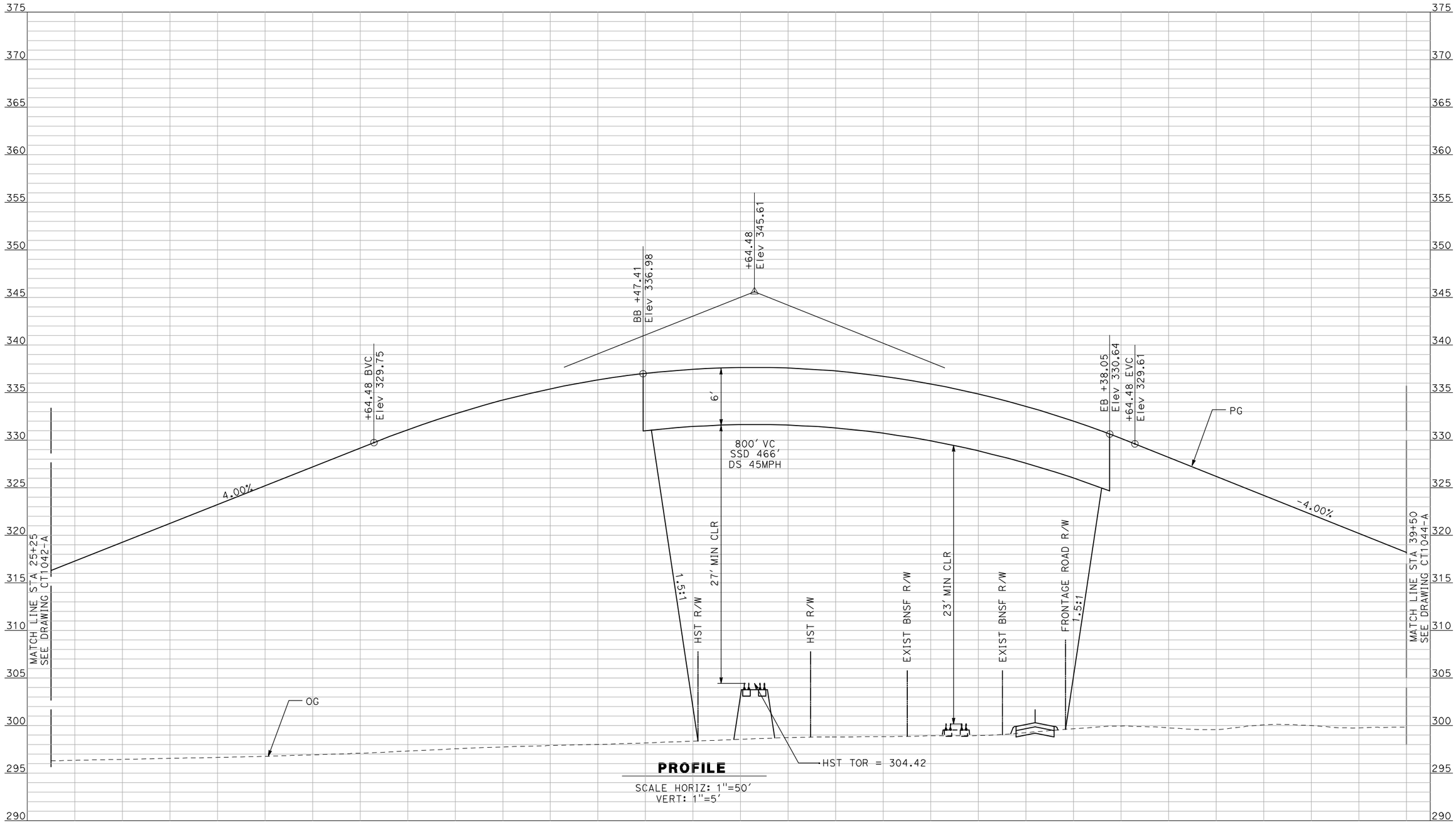
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 26
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1042-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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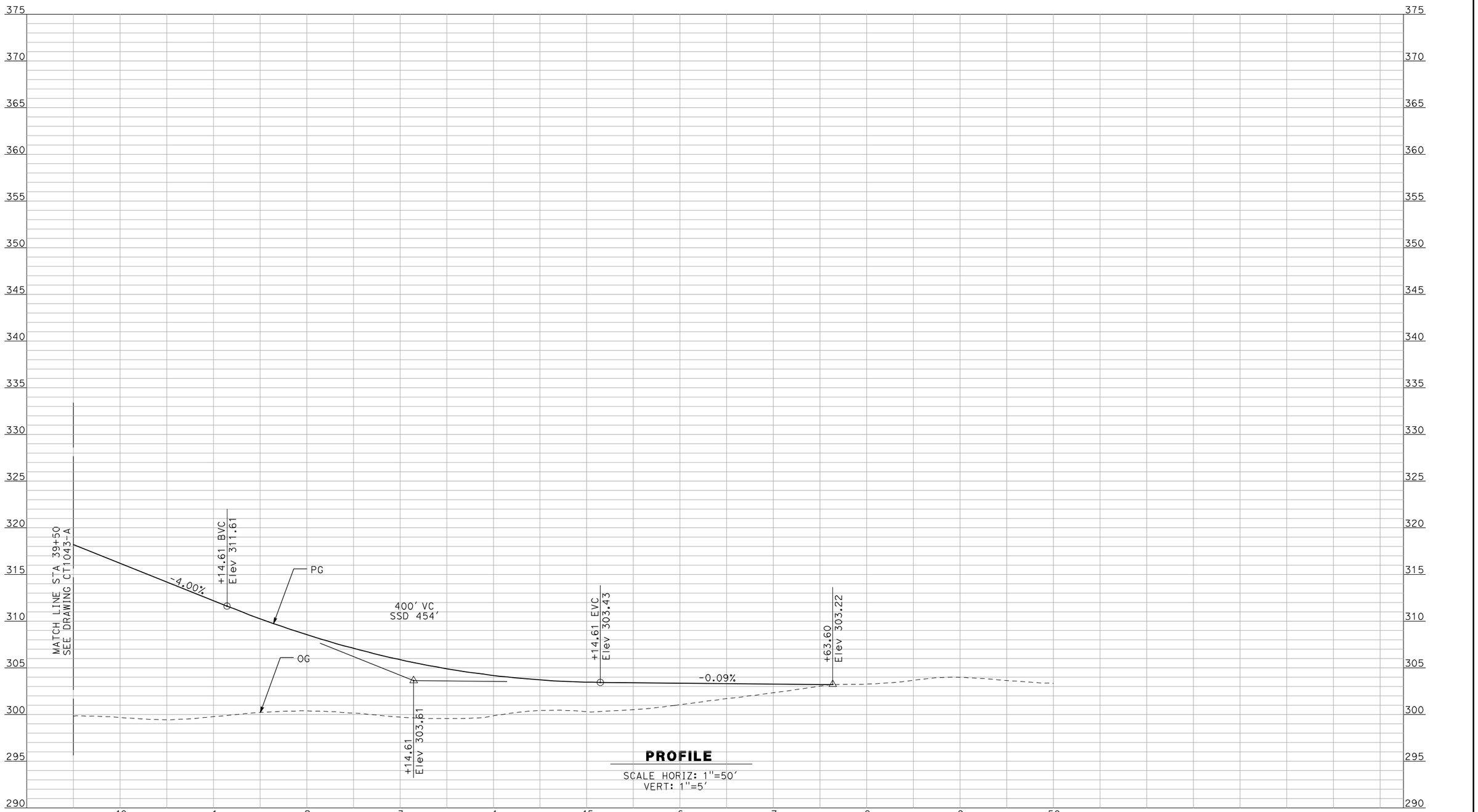
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 26
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1043-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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DATE 04/29/2011

**RECORD SET**
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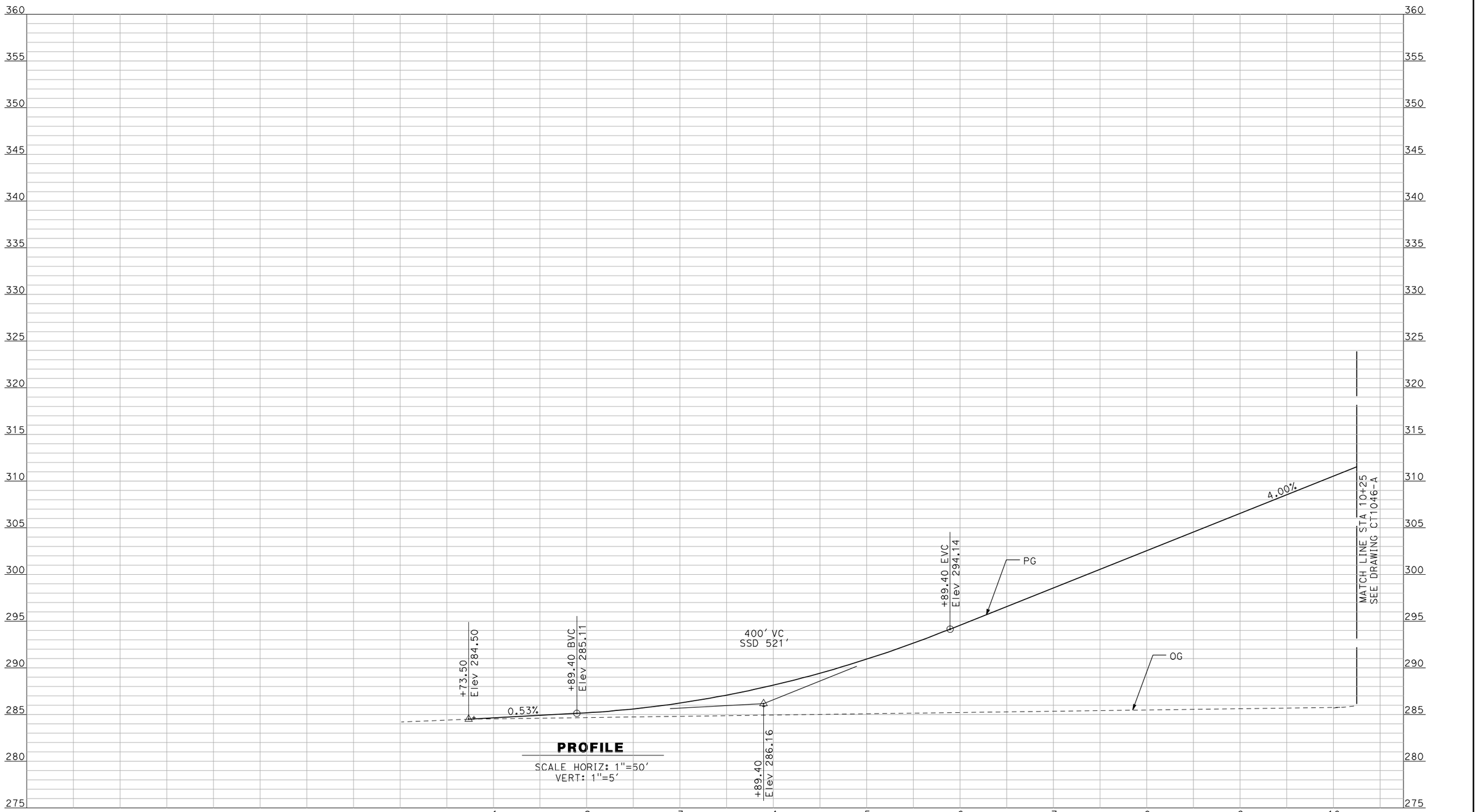
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 26
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1044-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

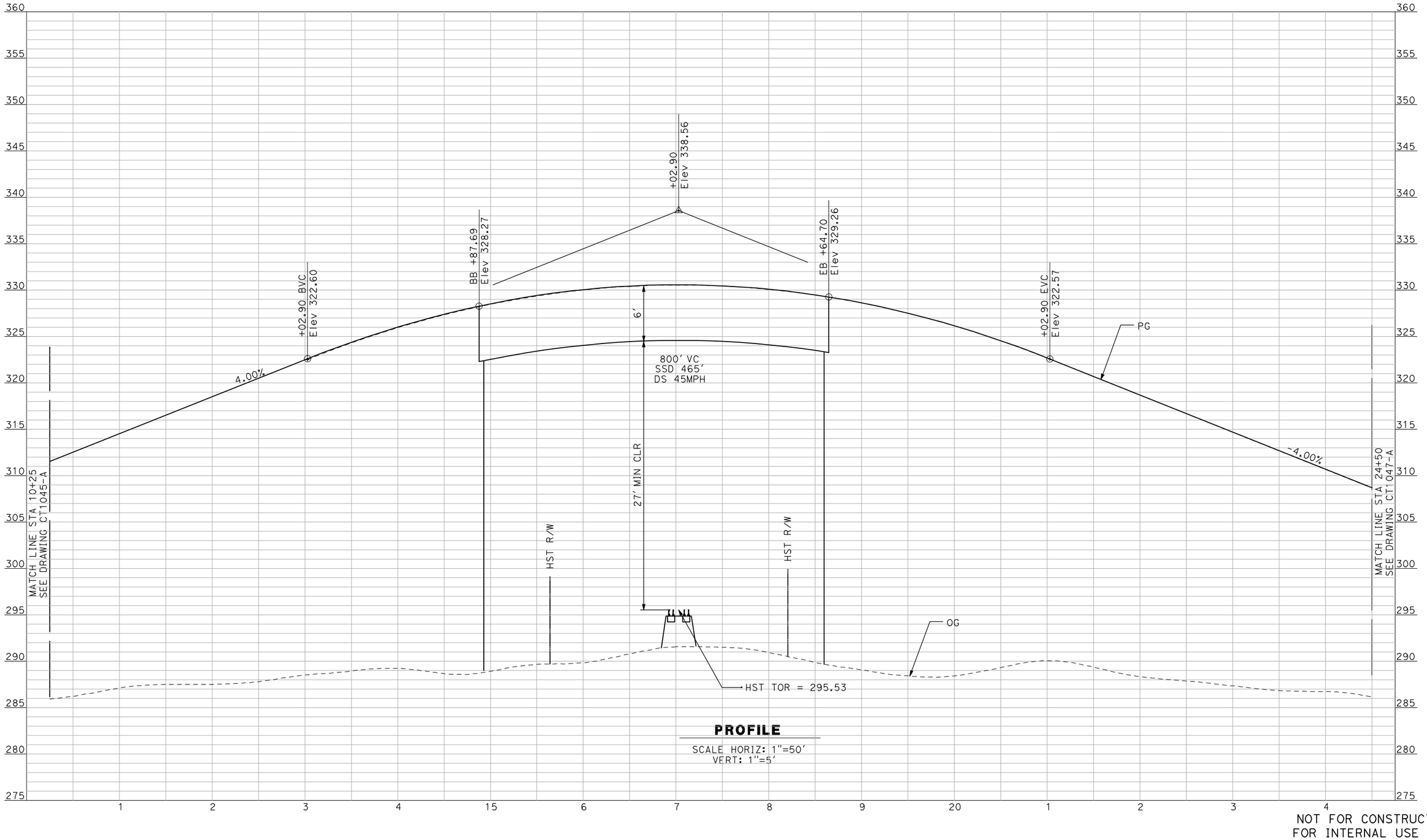
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - SANTA FE DR
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1045-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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IN CHARGE A. BOONE
DATE 04/29/2011

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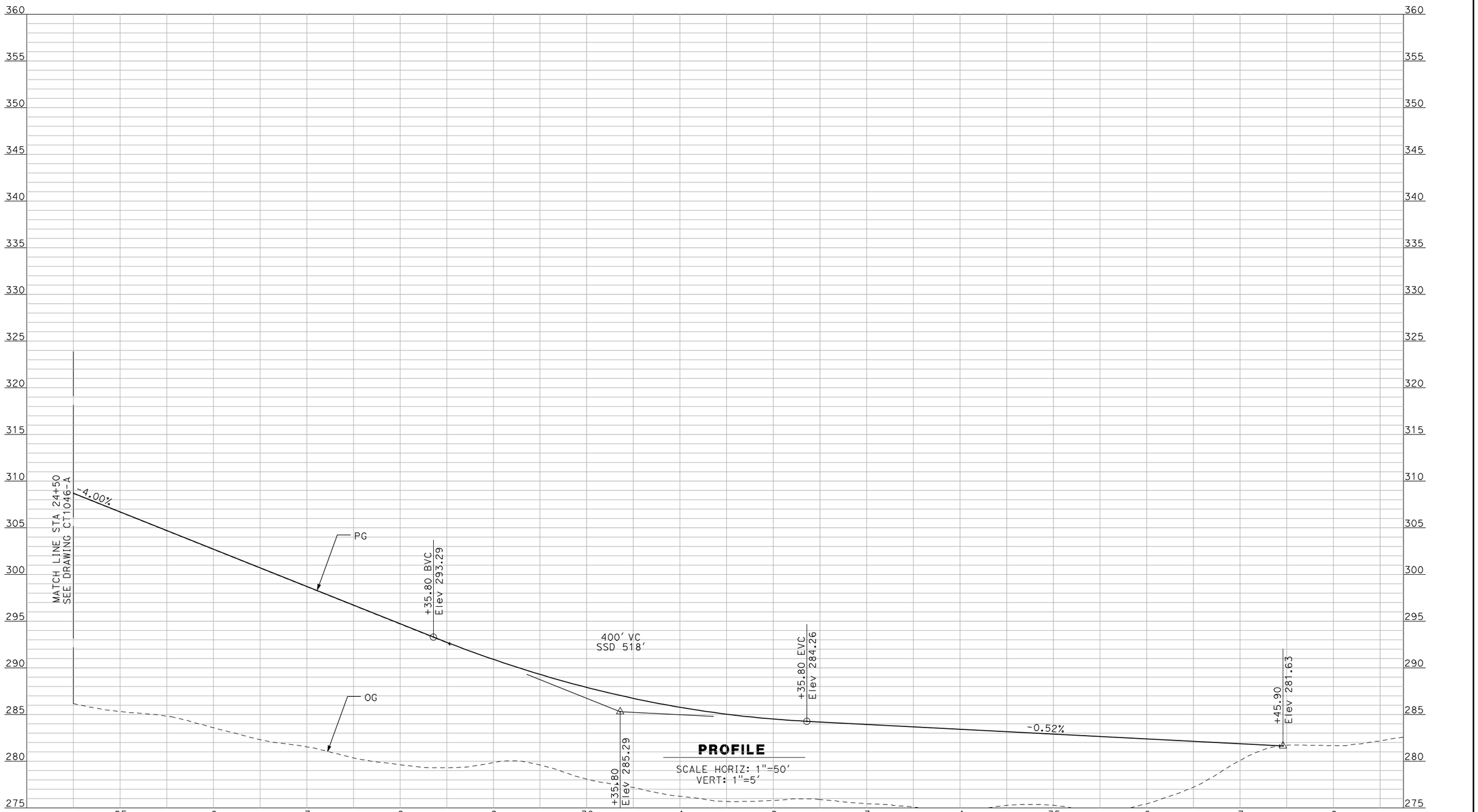
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - SANTA FE DR
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1046-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

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|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
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IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

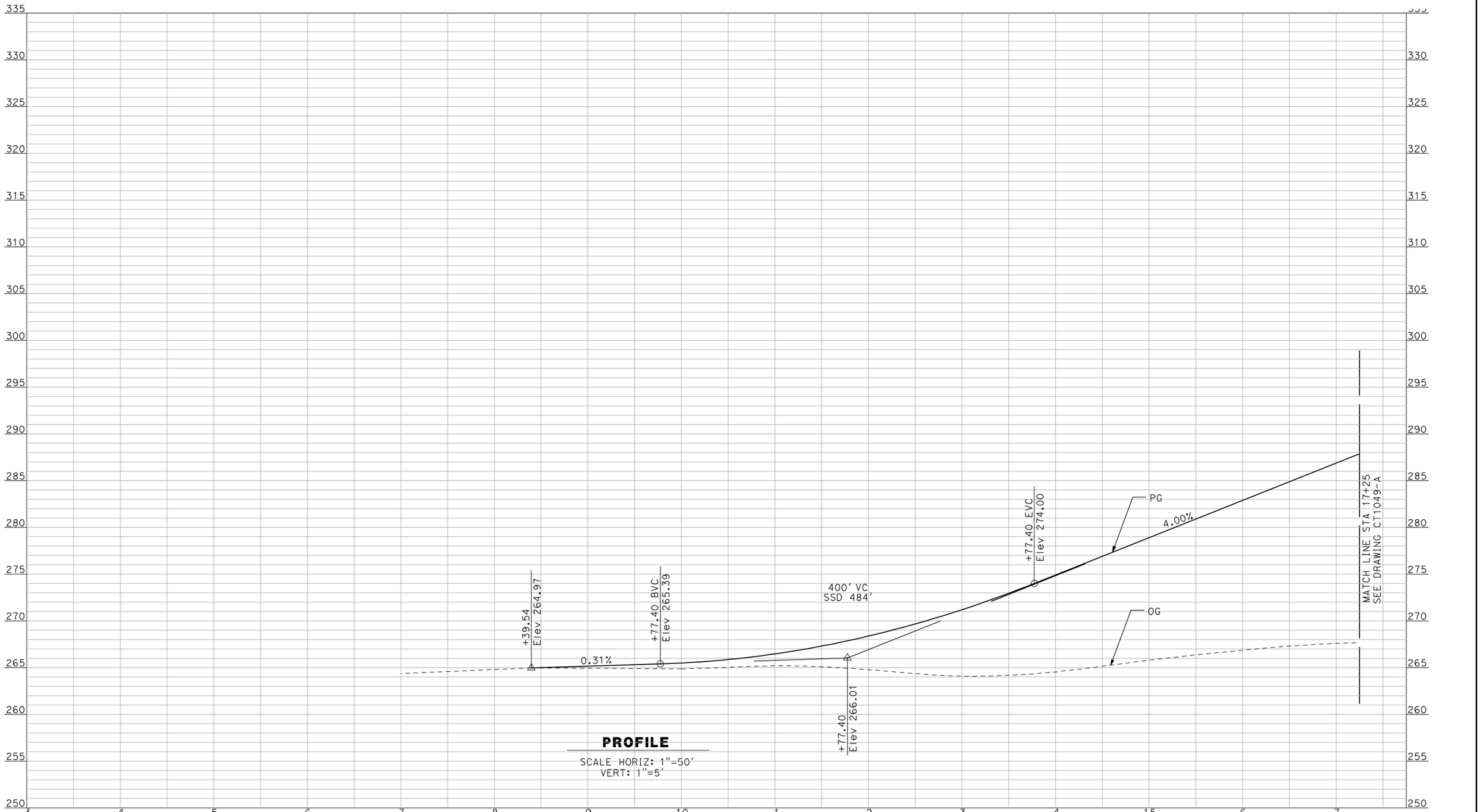
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - SANTA FE DR
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1047-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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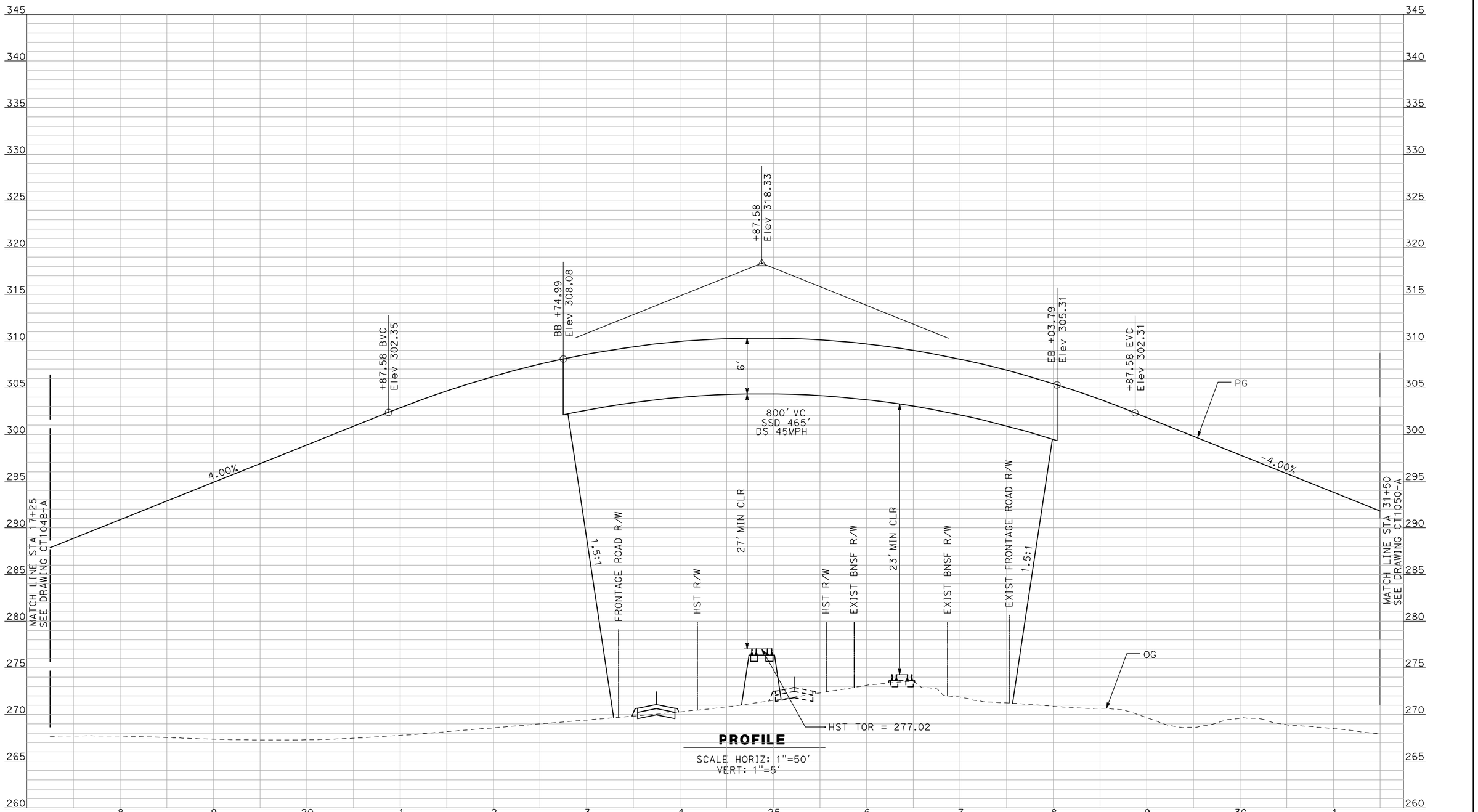
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - BUCHANAN HALLOW RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1048-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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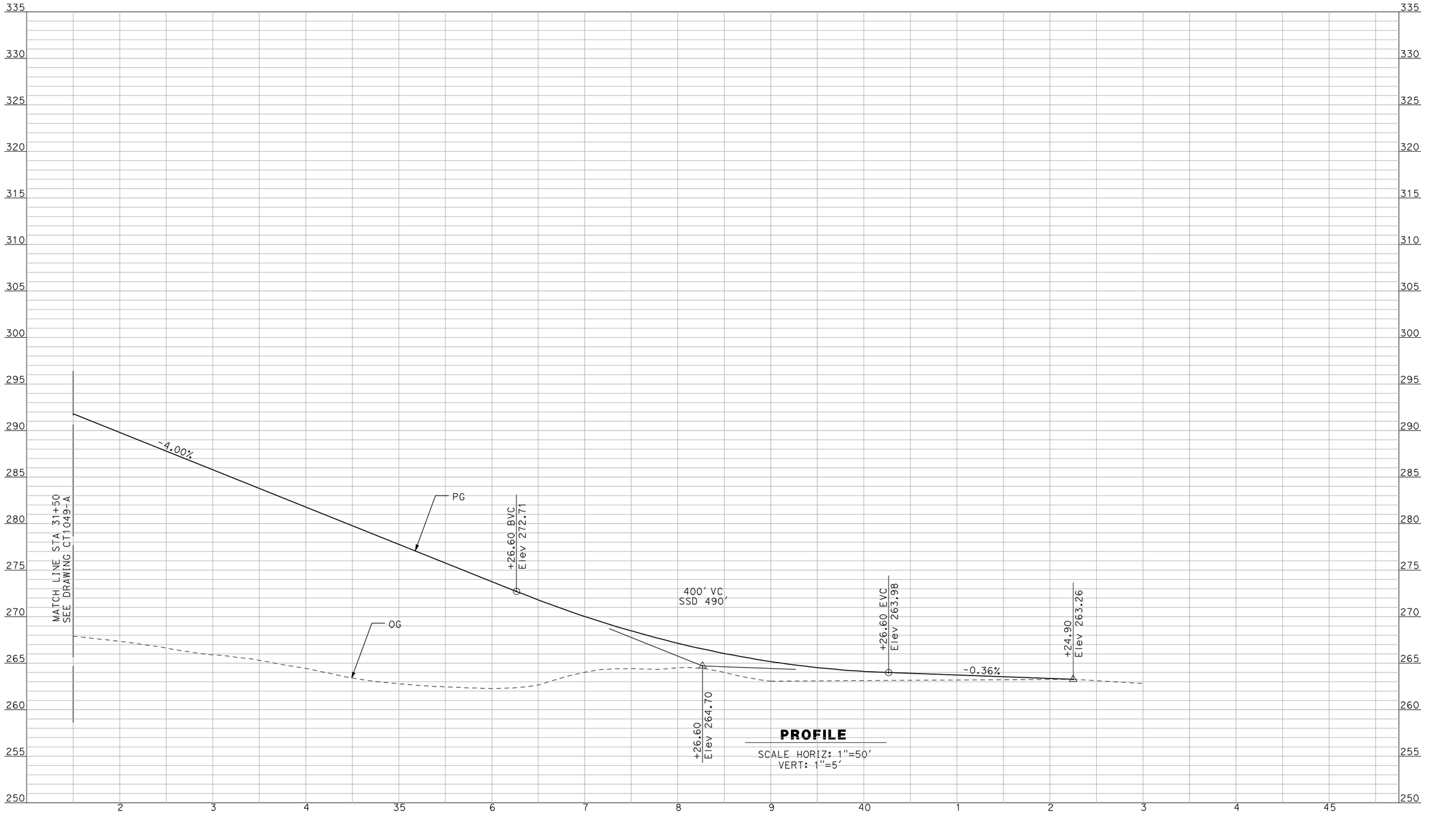
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - BUCHANAN HALLOW RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1049-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

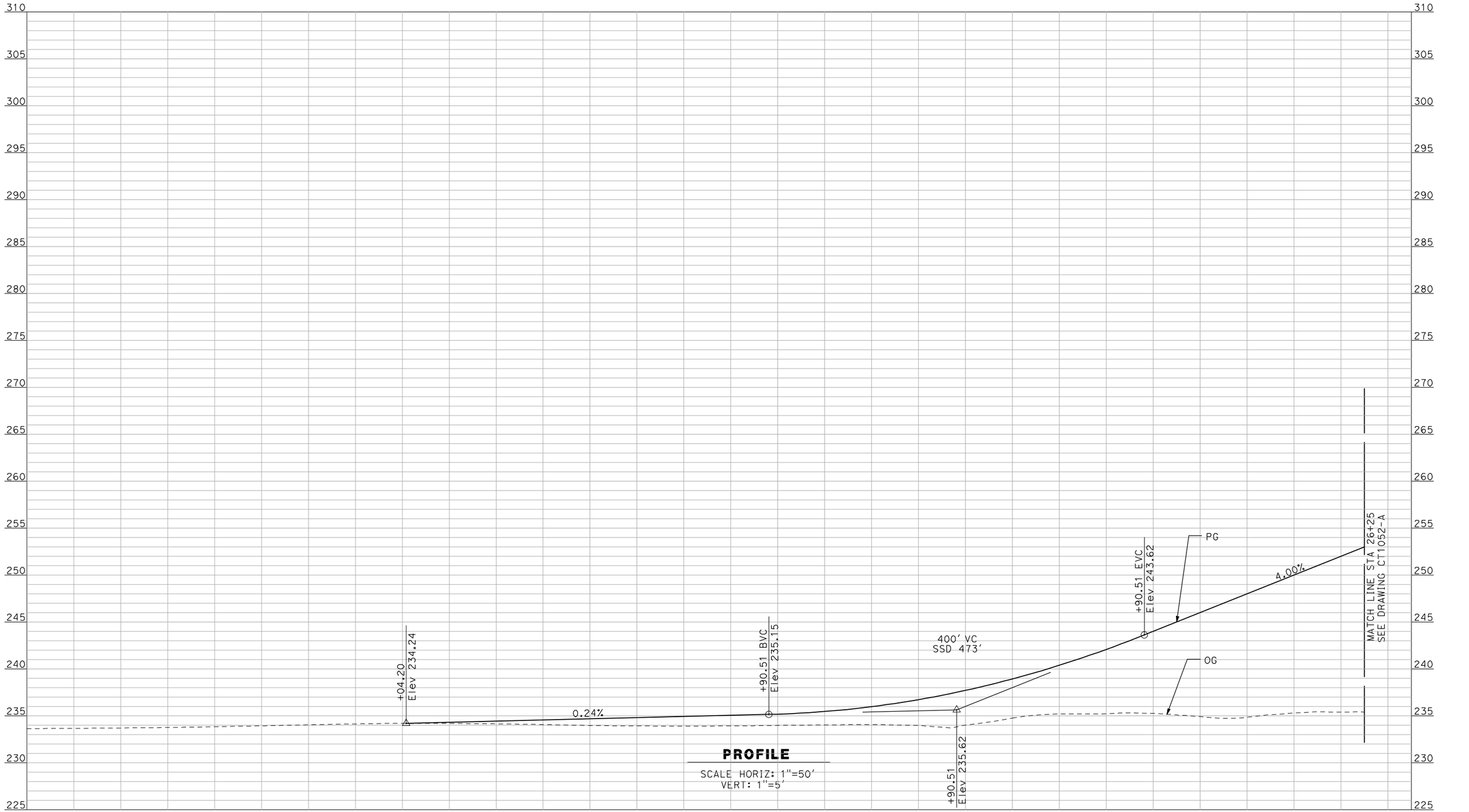
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - BUCHANAN HALLOW RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1050-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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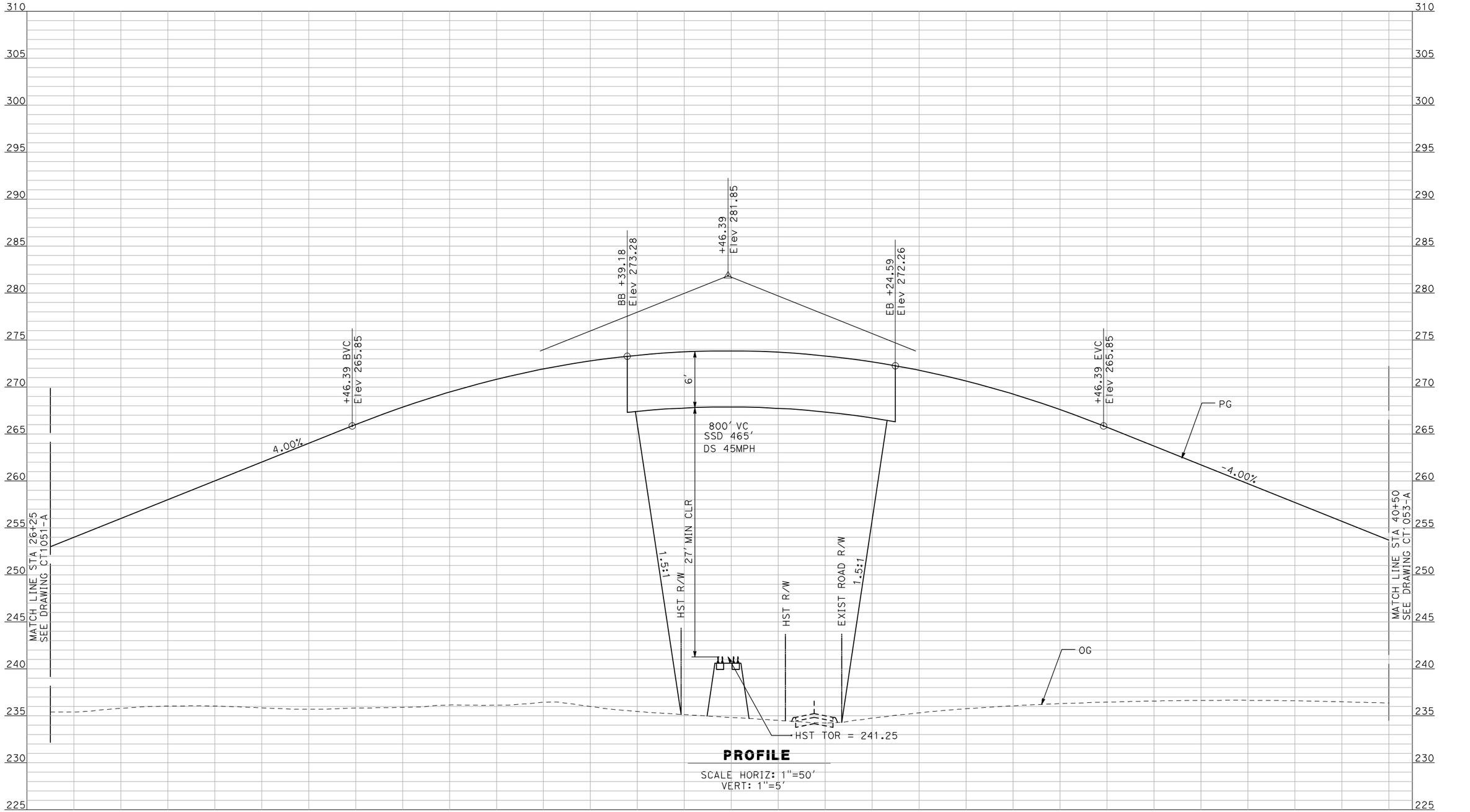
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1051-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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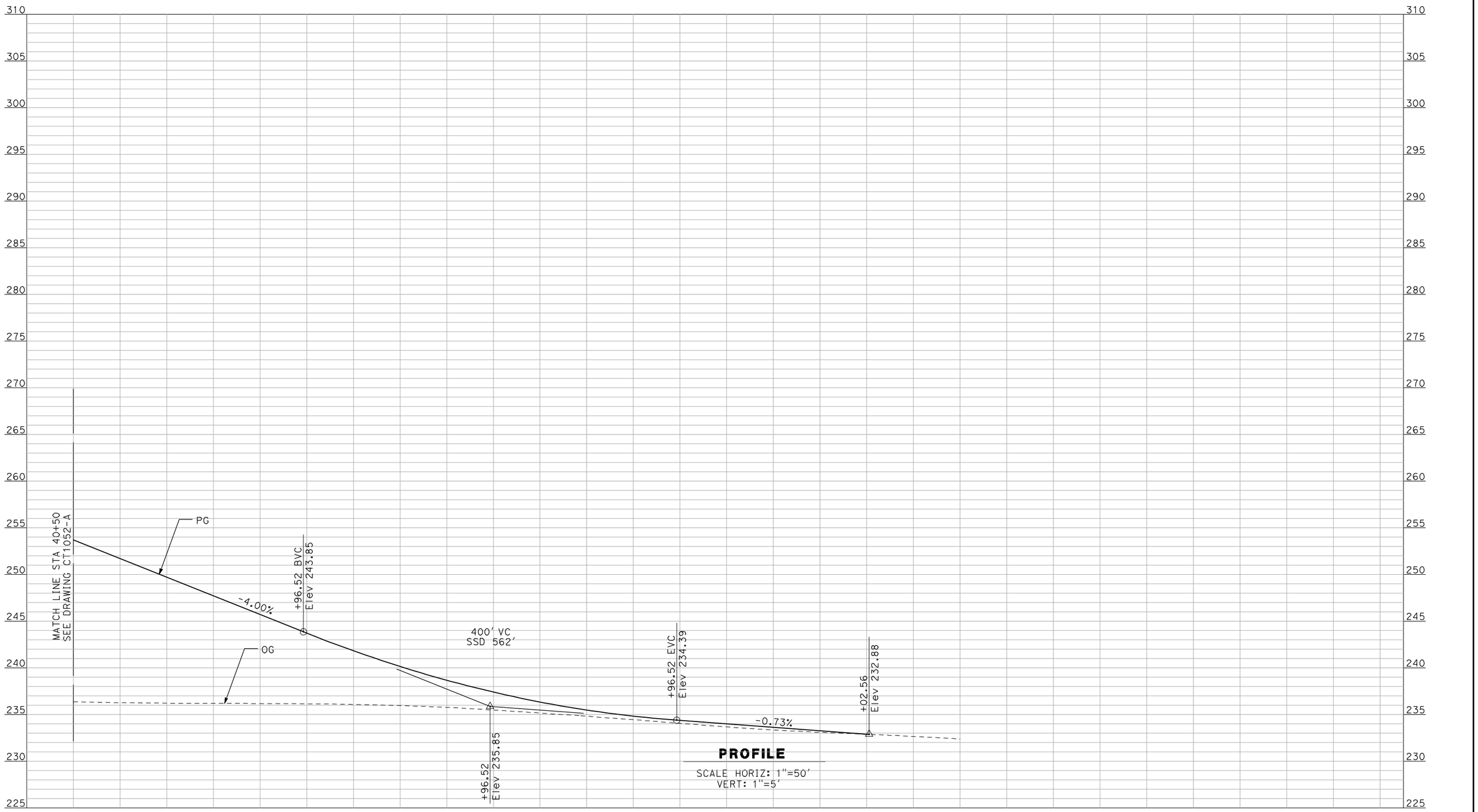
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1052-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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IN CHARGE A. BOONE
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1053-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

295 290 285 280 275 270 265 260 255 250 245 240 235 230 225 220 215 210

+63.77
Elev 225.50

+94.95 BVC
Elev 225.50

0.00%

400' VC
SSD 367'

PG

OG

+94.95 EVC
Elev 235.50

MATCH LINE STA 17+25
SEE DRAWING CT1055-A

+94.95
Elev 225.50

10 1 2 3 4 15 6 7

**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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**NOT FOR CONSTRUCTION**

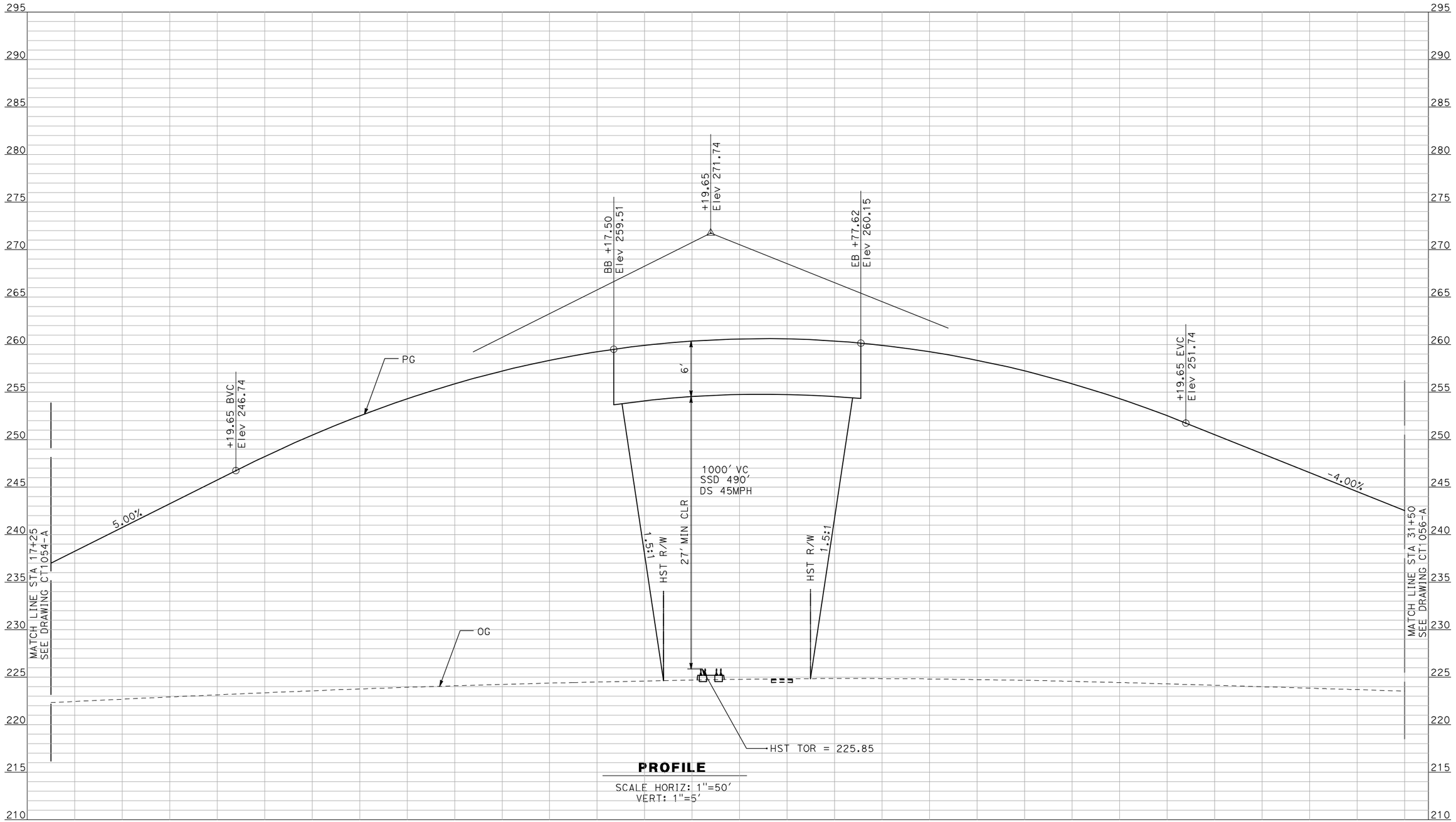
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1054-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

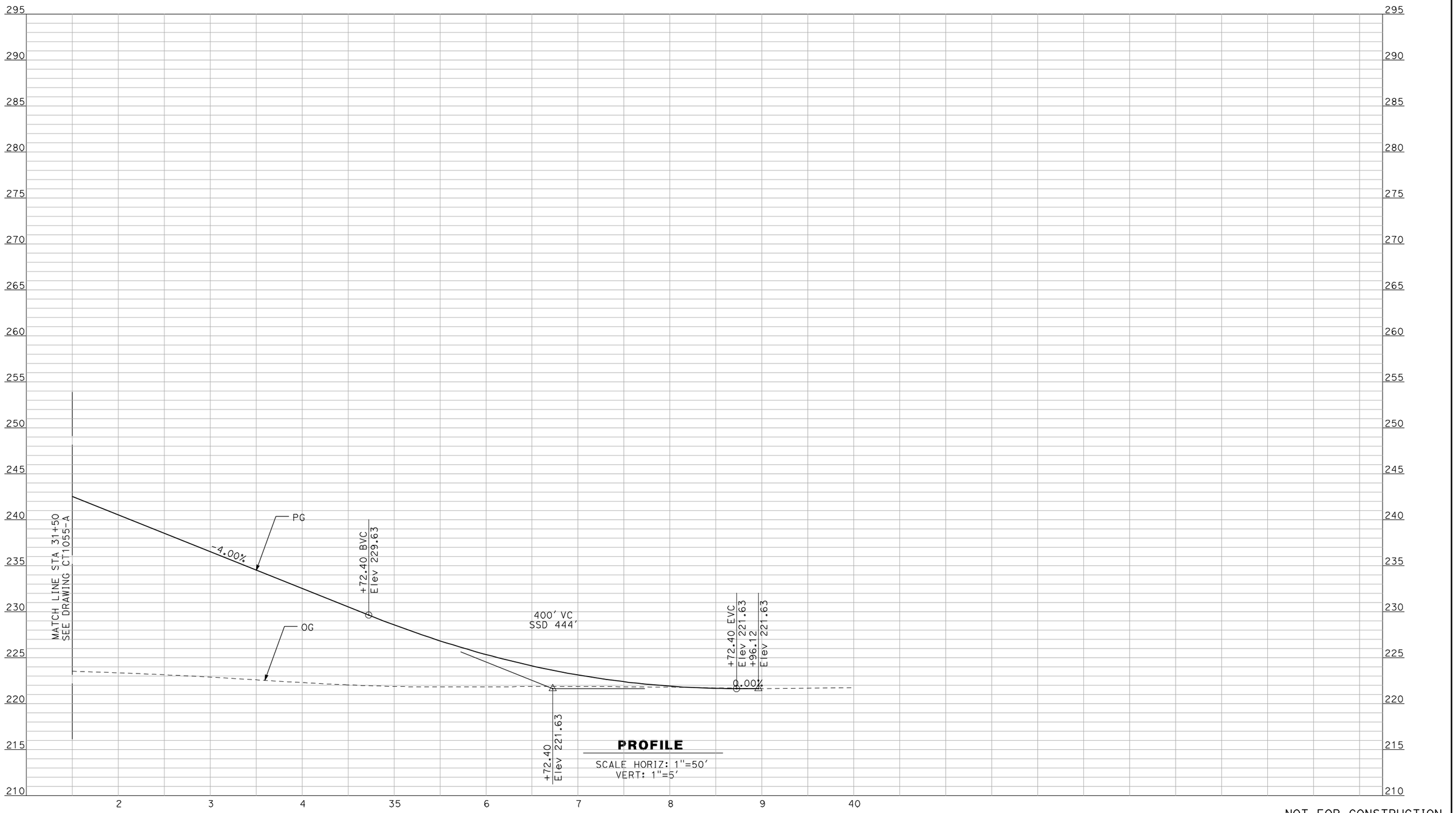
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBUR. GIBSON RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1055-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

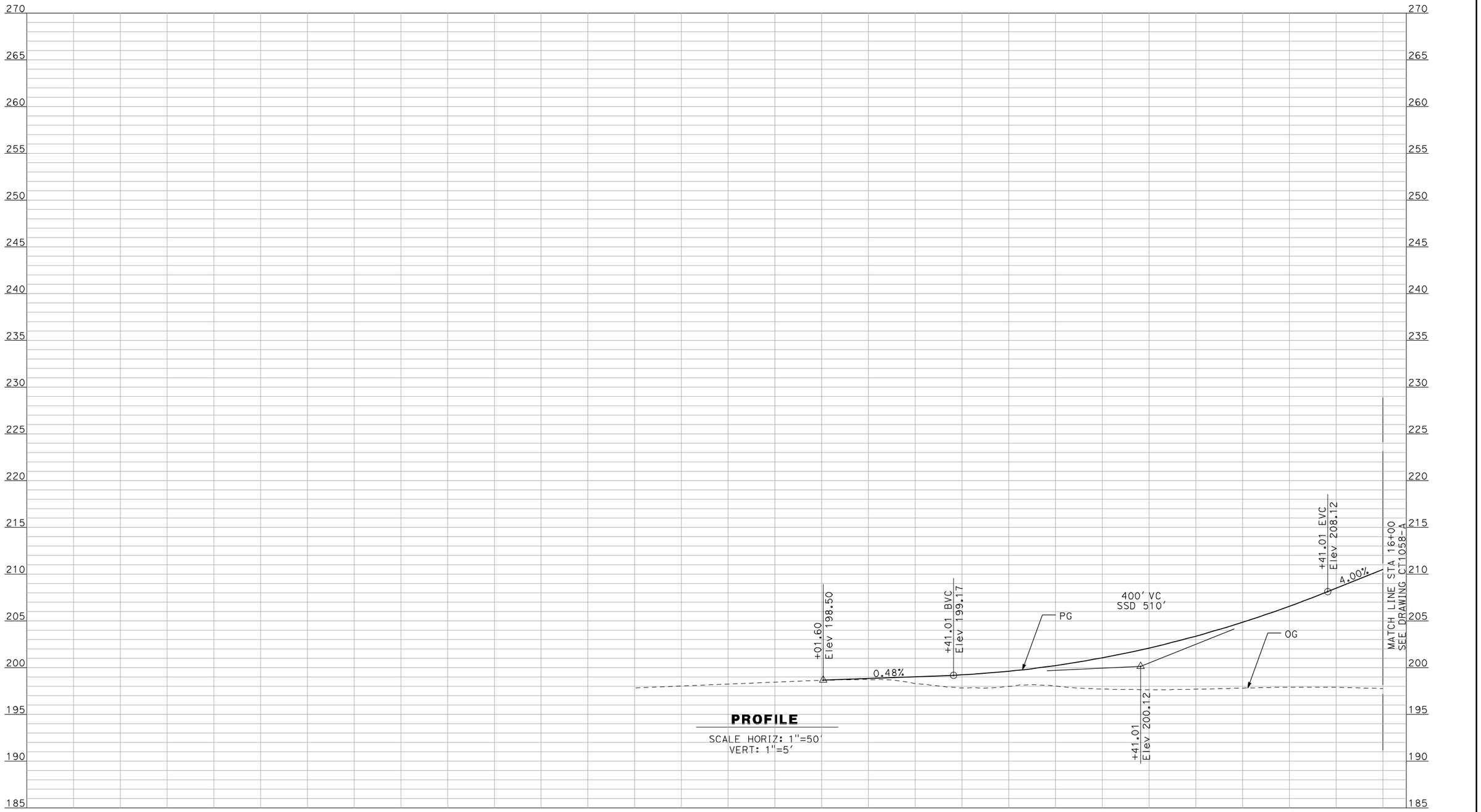
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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBUR. GIBSON RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1056-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|

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DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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**15% DESIGN SUBMITTAL**

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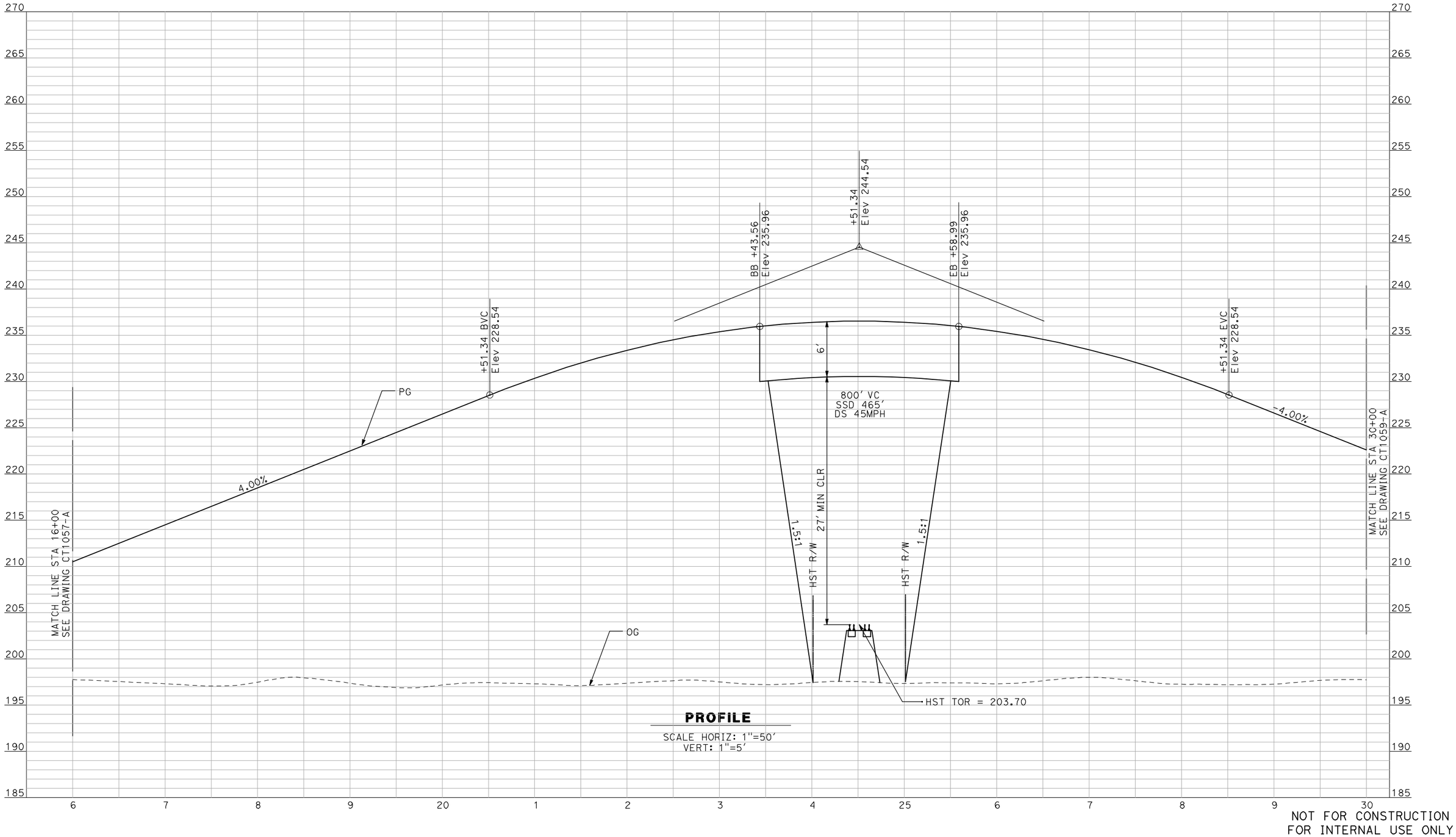
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - ARBOLEDA DR
PROFILE
SHEET OF 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1057-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

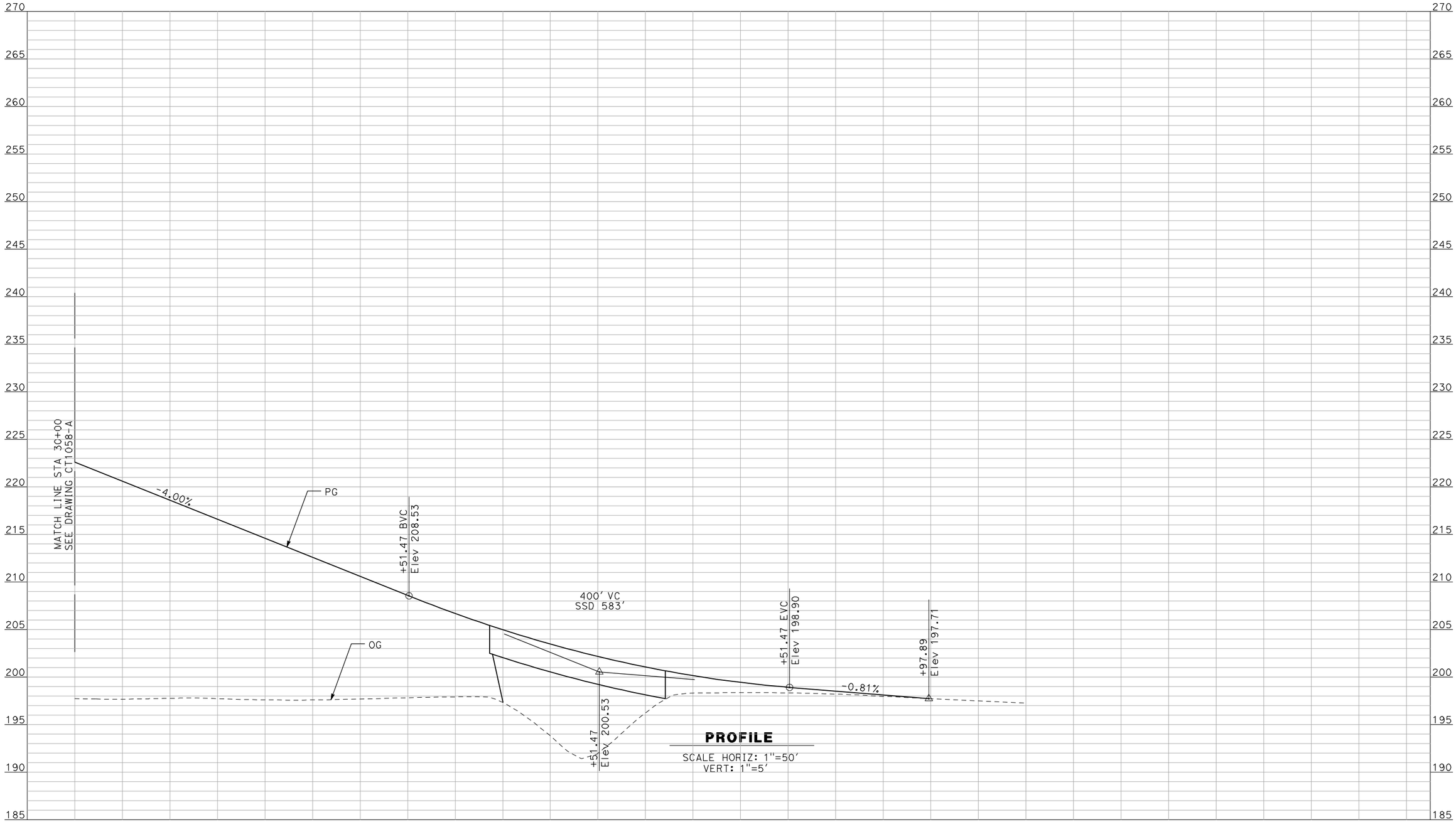
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - ARBOLEDA DR
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1058-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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DATE 04/29/2011

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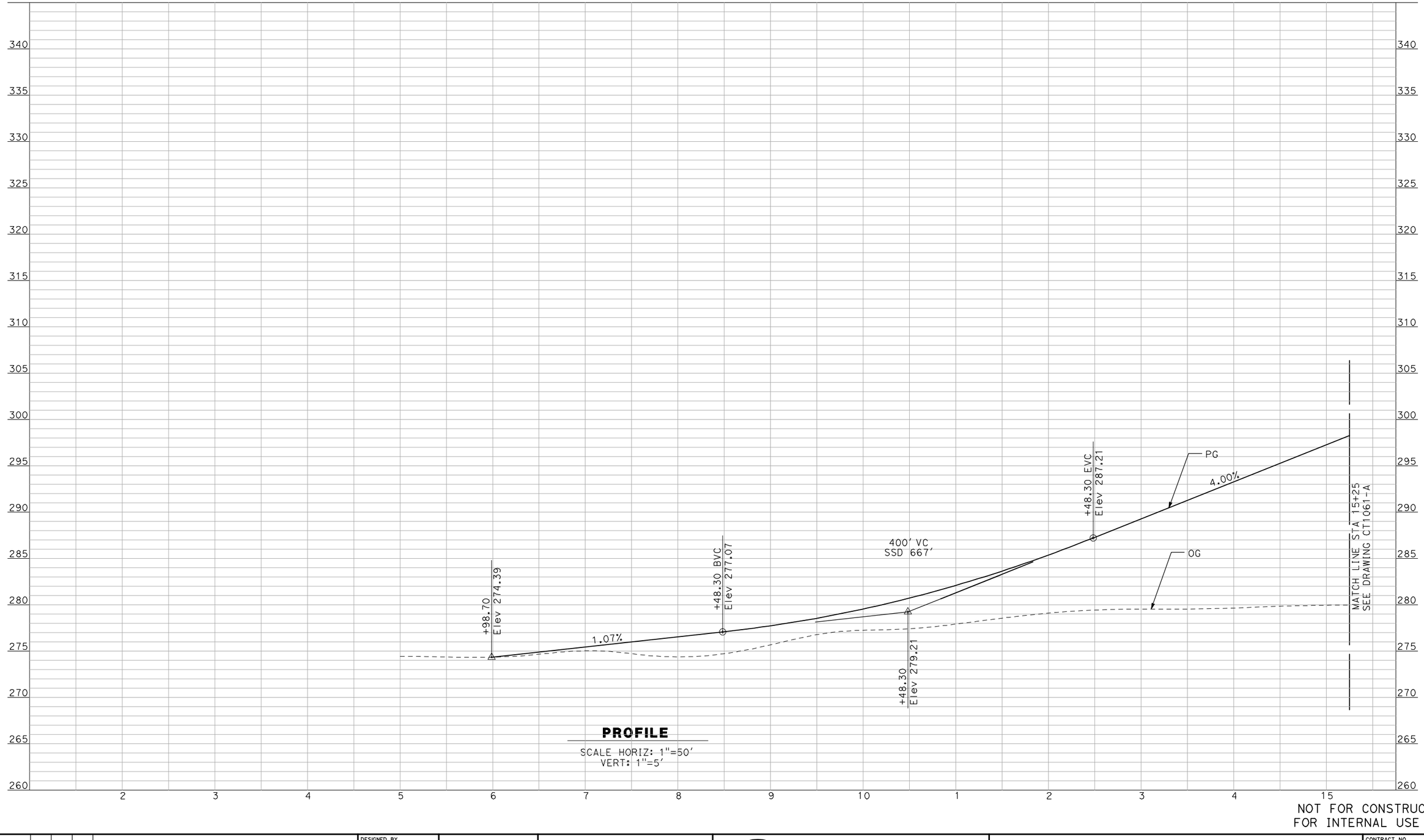
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - ARBOLEDA DR
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1059-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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**15% DESIGN SUBMITTAL**

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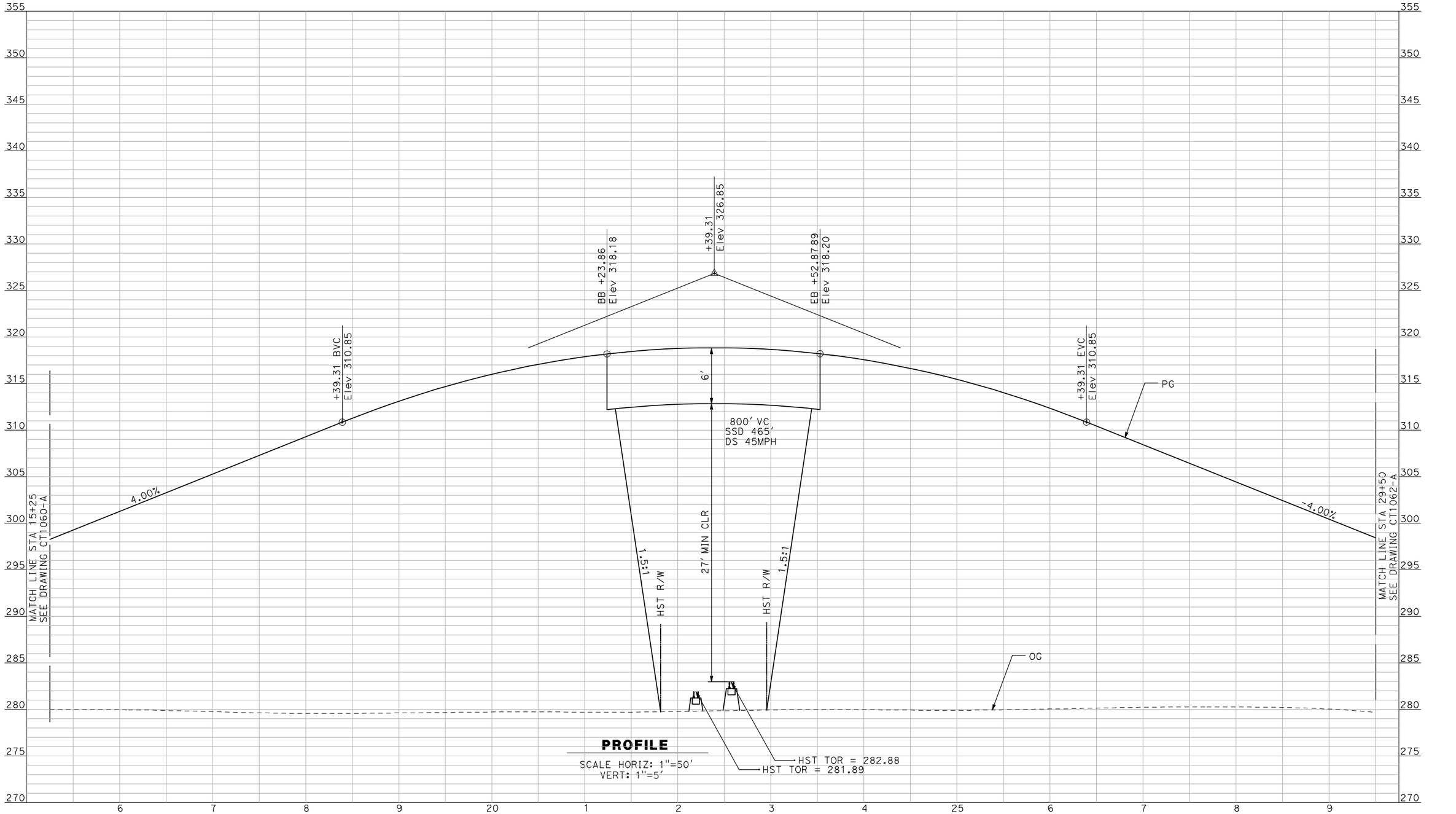
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF WYE CONNECTION - AVE 21 WYE
GRADE SEPARATION - AVENUE 22
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1060-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

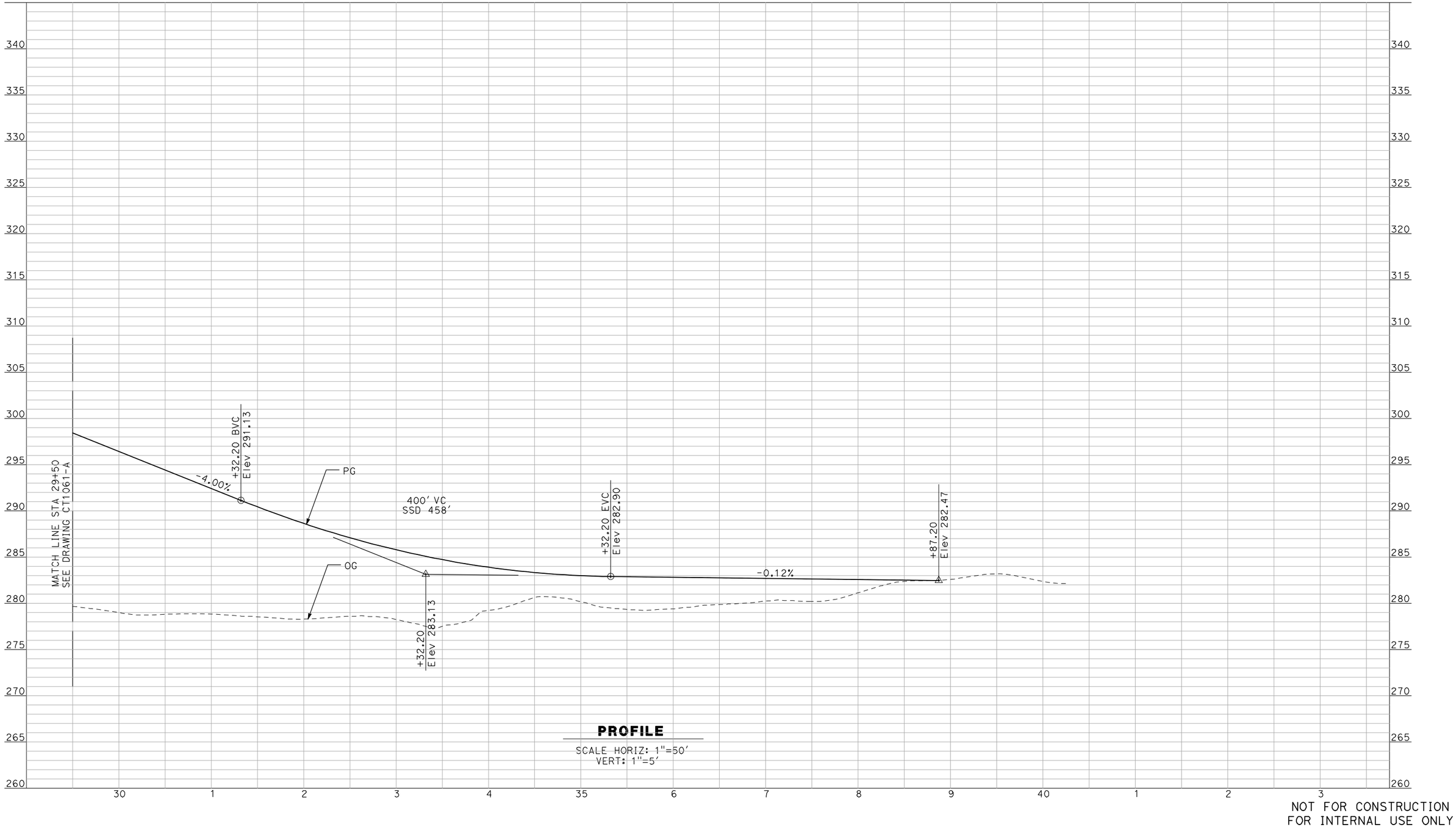
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF WYE CONNECTION - AVE 21 WYE
GRADE SEPARATION - AVENUE 22
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1061-A
SCALE AS SHOWN
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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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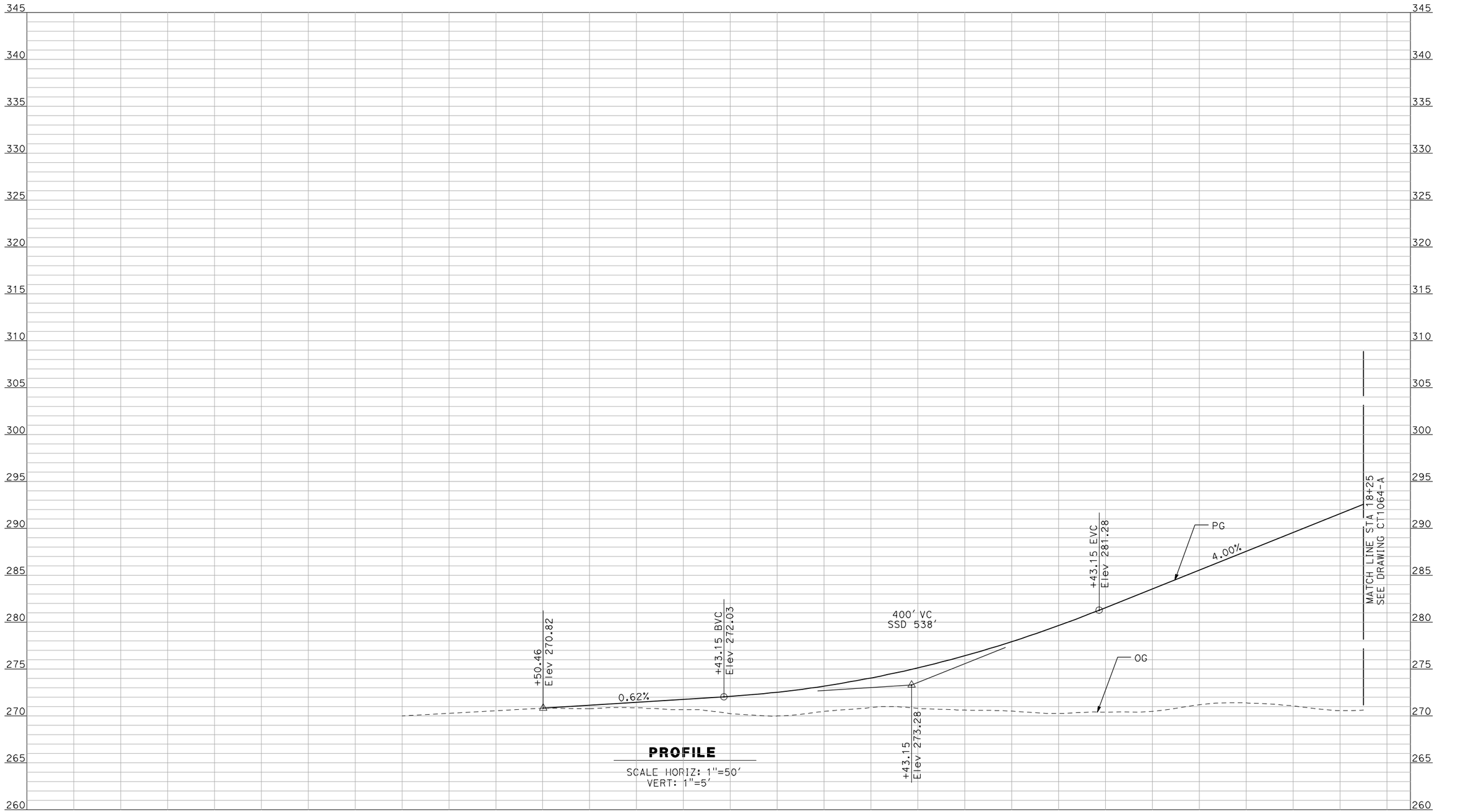
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF WYE CONNECTION - AVE 21 WYE
GRADE SEPARATION - AVENUE 22
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1062-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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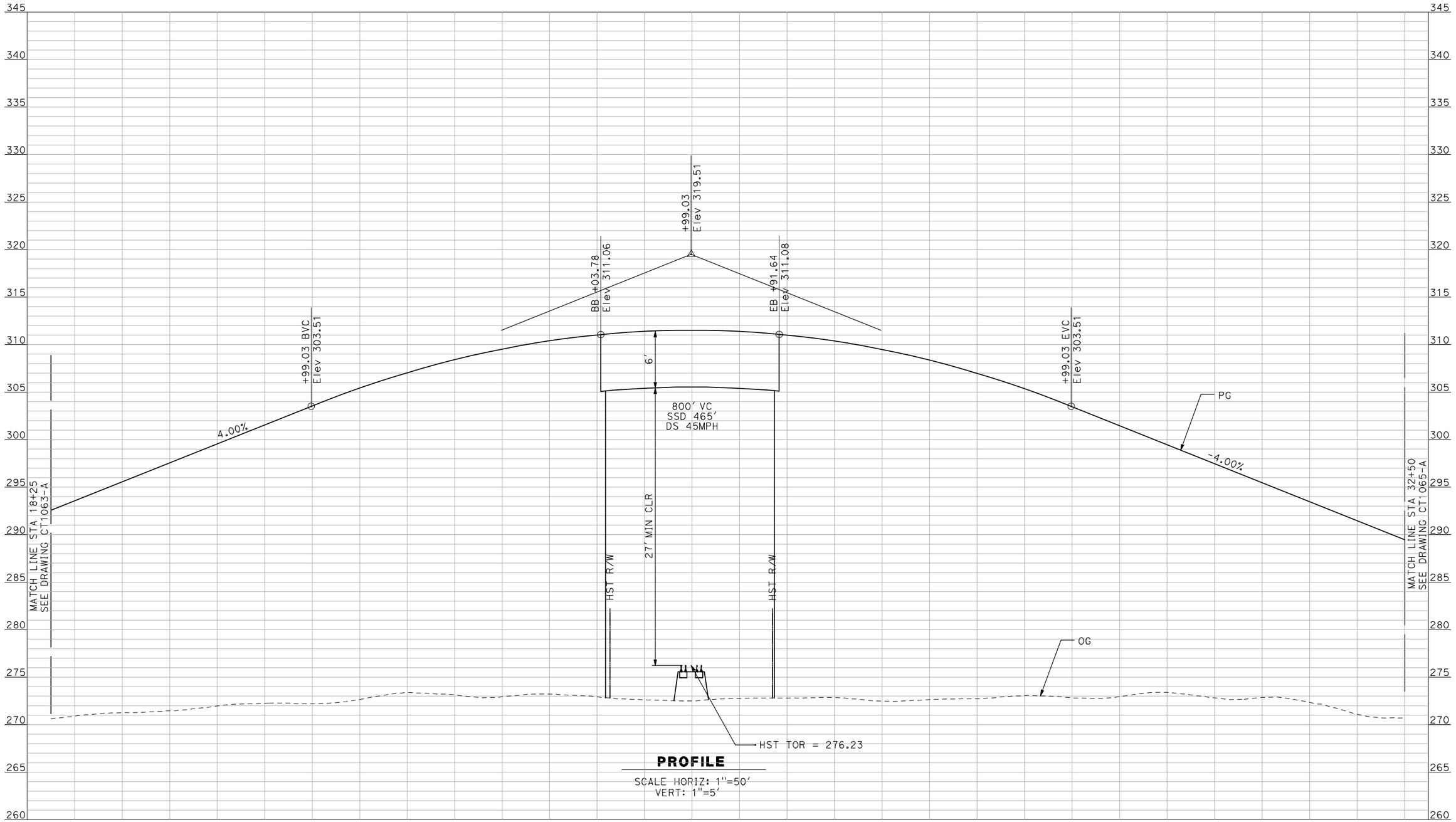
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1063-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

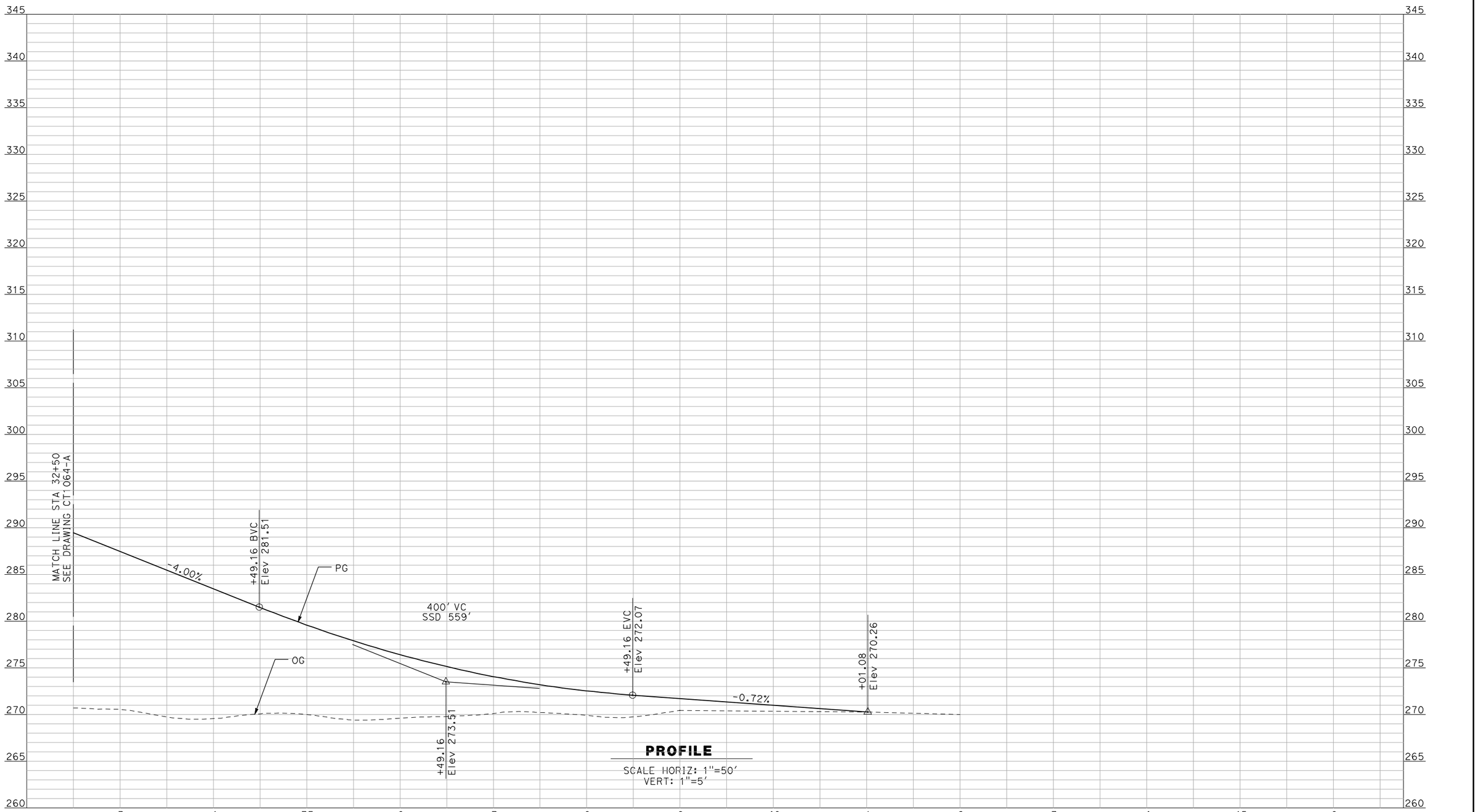
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1064-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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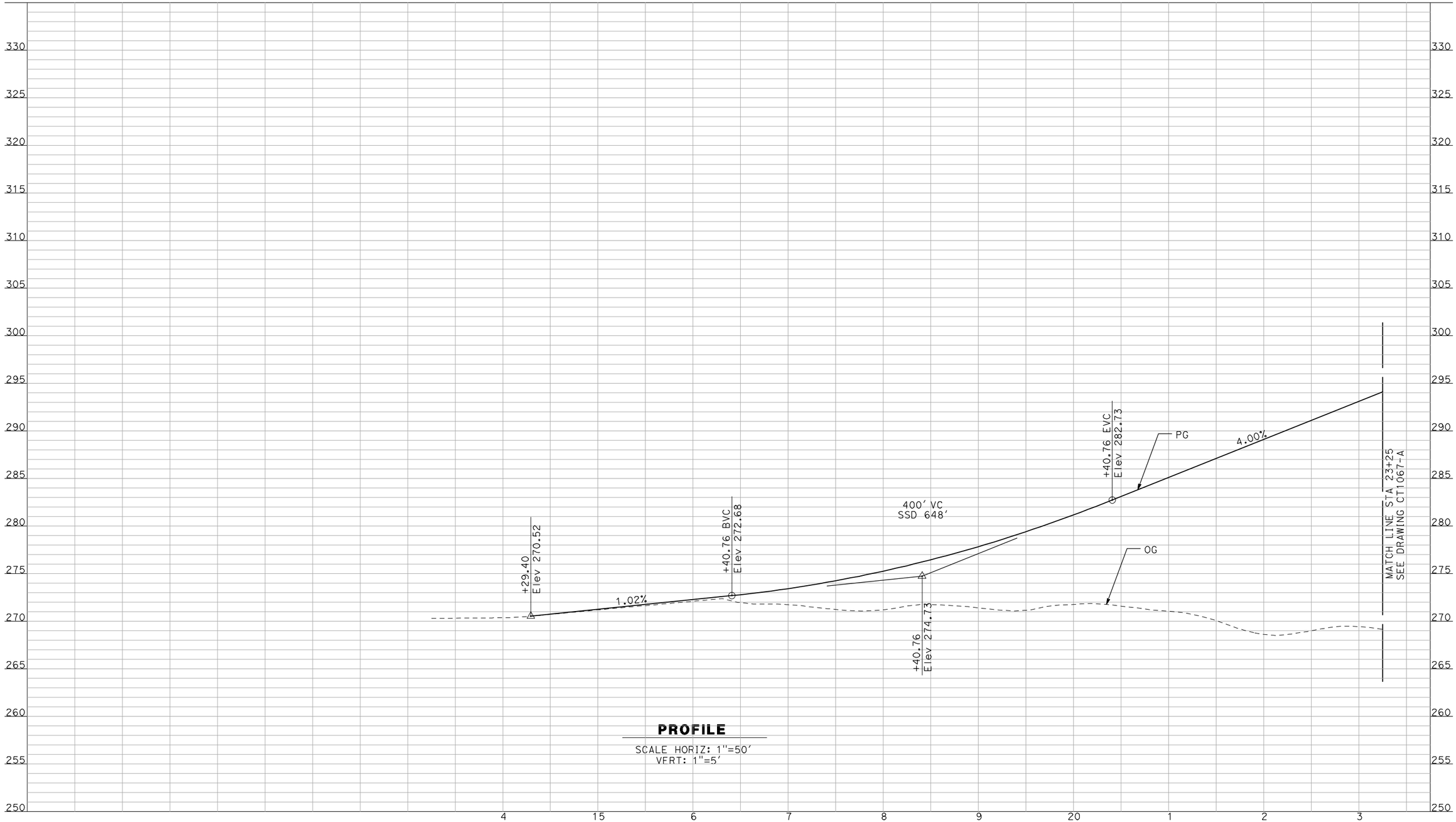
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1065-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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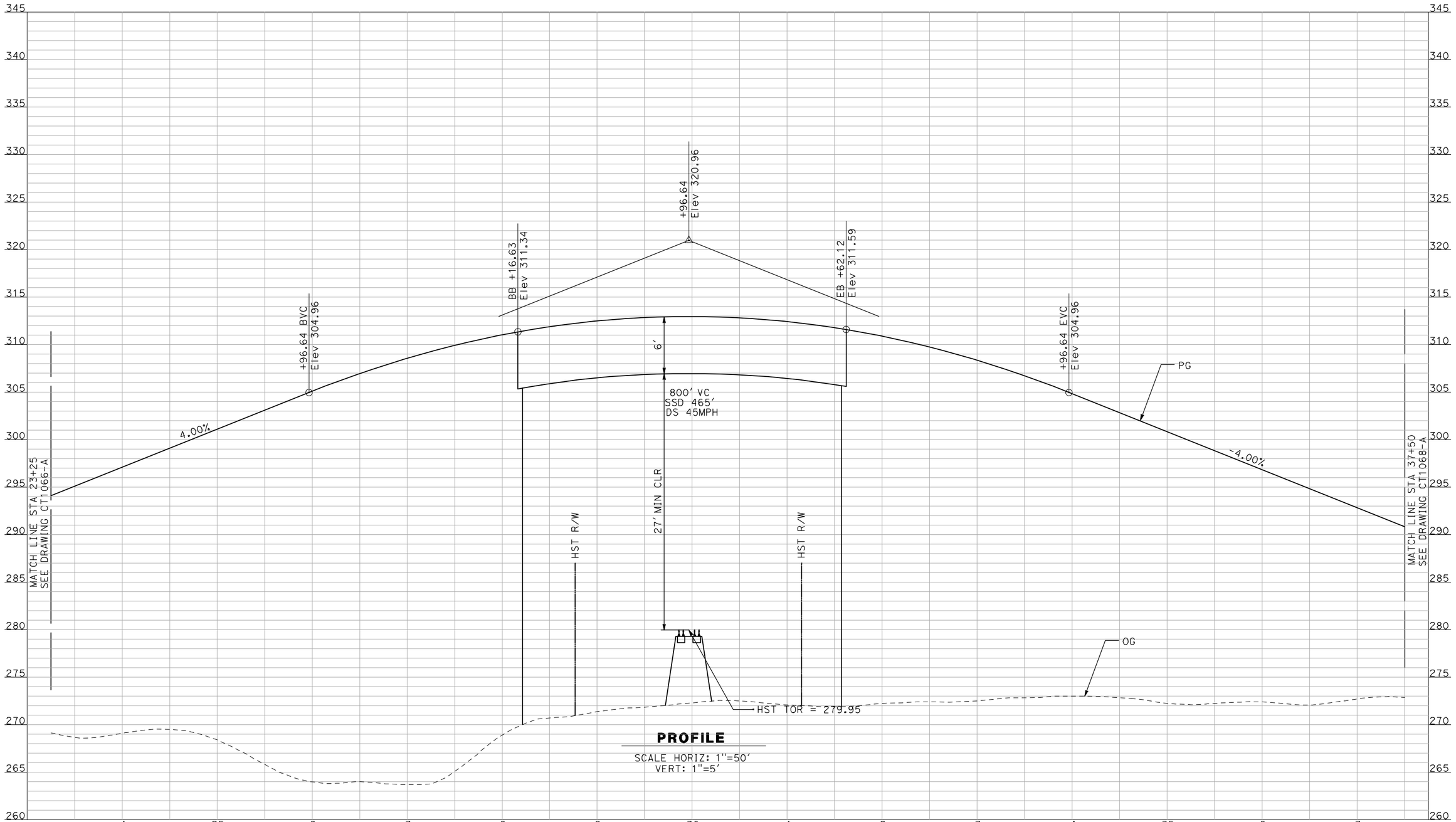
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20 1/2
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1066-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

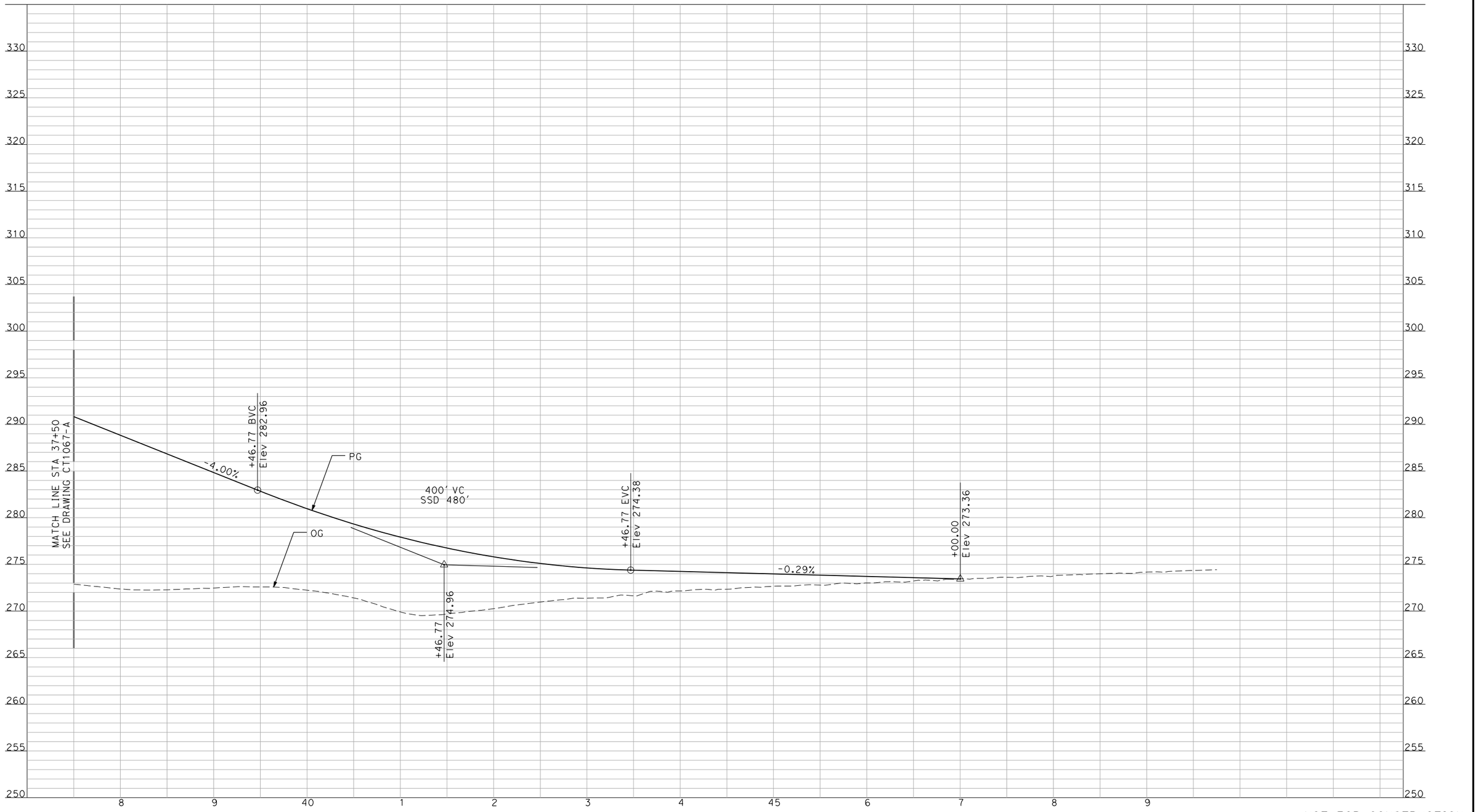
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20 1/2
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1067-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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IN CHARGE: A. BOONE
DATE: 06/30/2011

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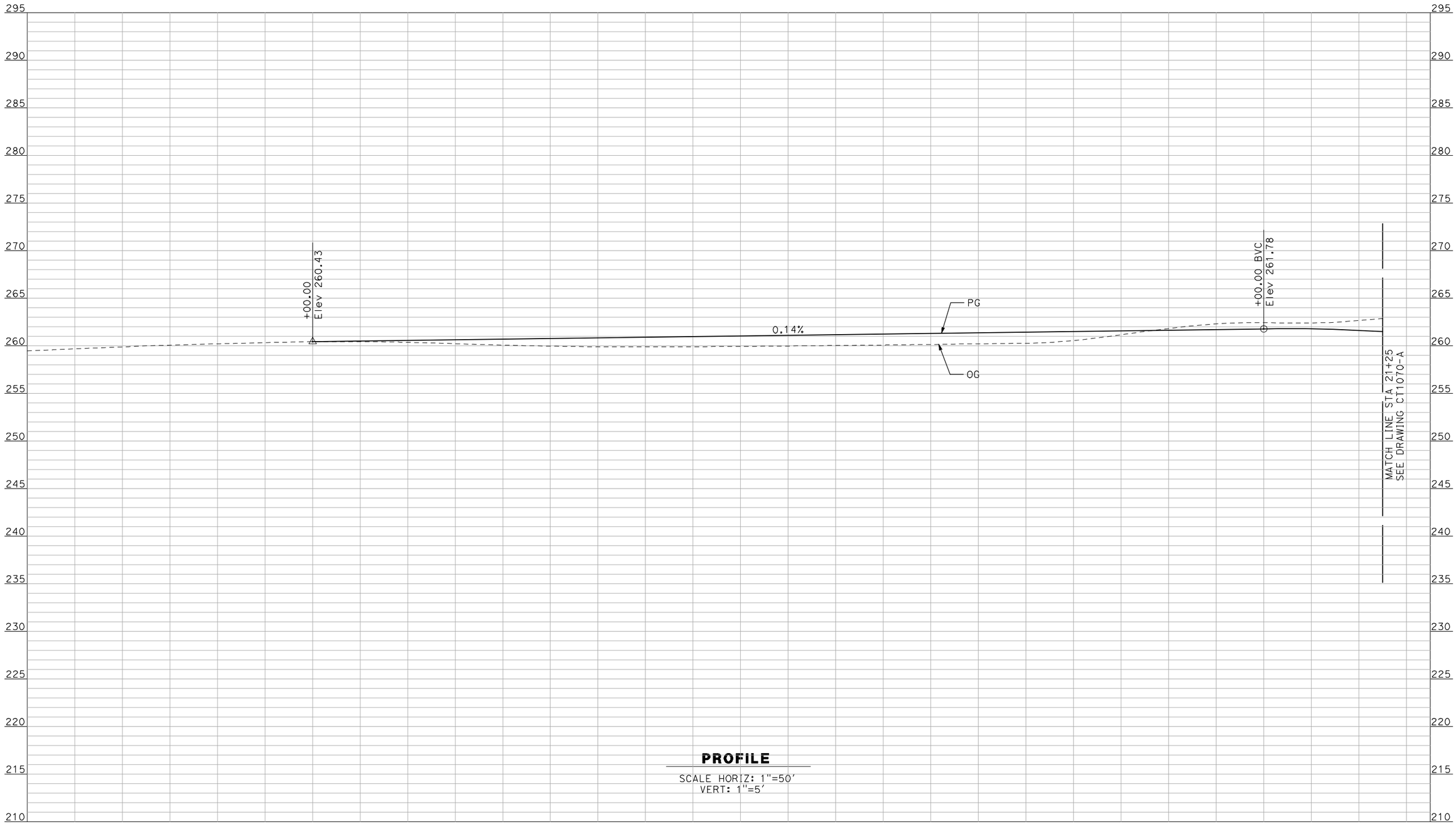
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 20 1/2
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1068-A
SCALE AS SHOWN
SHEET NO. OF ###

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DeMarcoF




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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IN CHARGE: A. BOONE
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Sacramento, CA 95811
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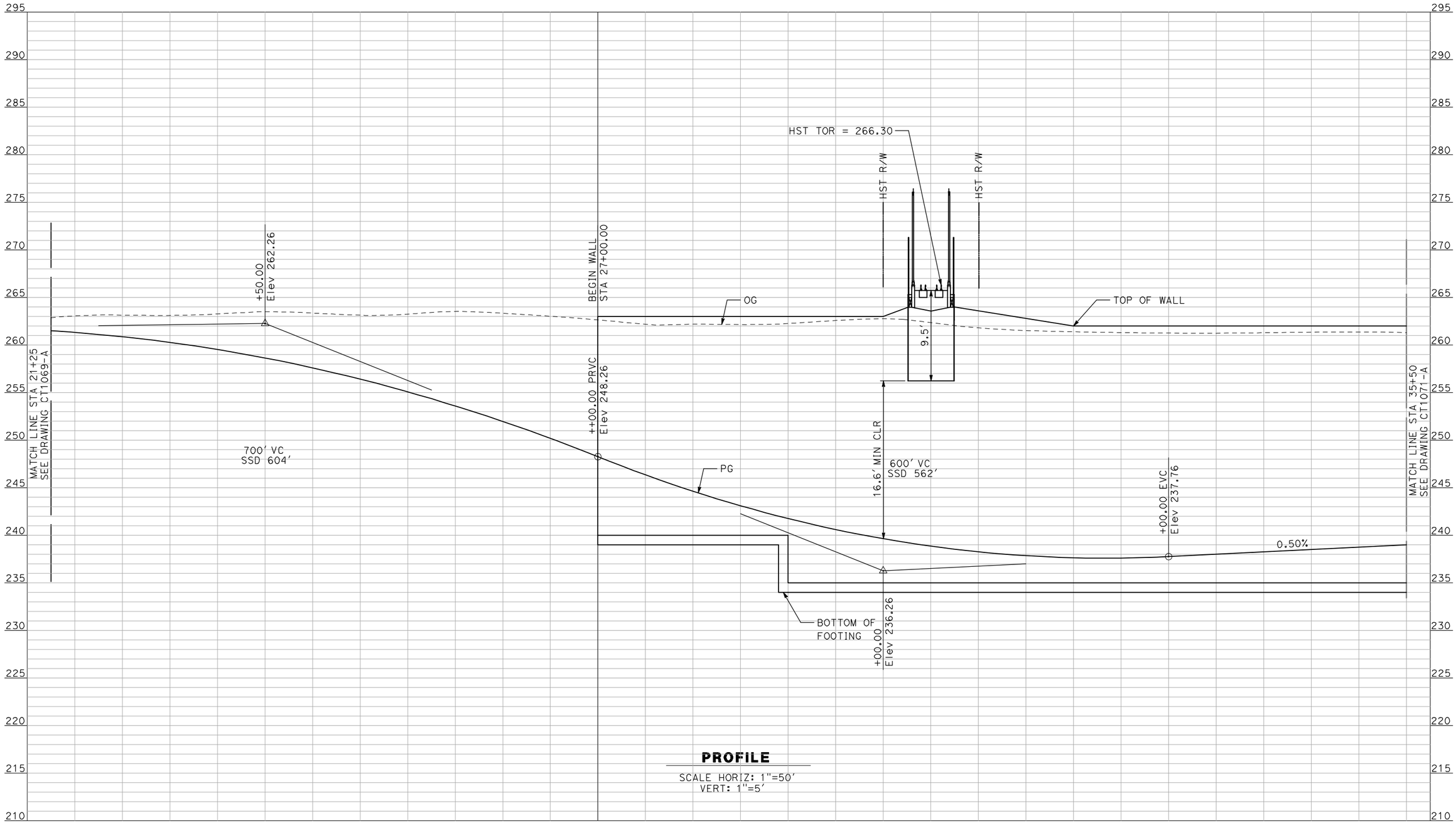
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - ROAD 22
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1069-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - ROAD 22
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1070-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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GibsonR1

HST TOR = 267.94

HST TOR = 271.21

HST R/W

HST R/W

9.5'

9.5'

TOP OF WALL

END WALL
STA 43+00.00

OG

+25.00
Elev 264.63

OG

MATCH LINE STA 35+50
SEE DRAWING CT1070-A

16.5' MIN CLR

+25.00 BVC
Elev 241.38

++25.00 PRVC
Elev 252.63

PG

500' VC
SSD 614'

600' VC
SSD 583'

MATCH LINE STA 49+50
SEE BELOW

0.50%

+75.00
Elev 242.63

BOTTOM OF FOOTING

**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

+25.00 EVC
Elev 265.19

PG

+82.25
Elev 265.67

0.19%

OG

MATCH LINE STA 49+50
SEE ABOVE

**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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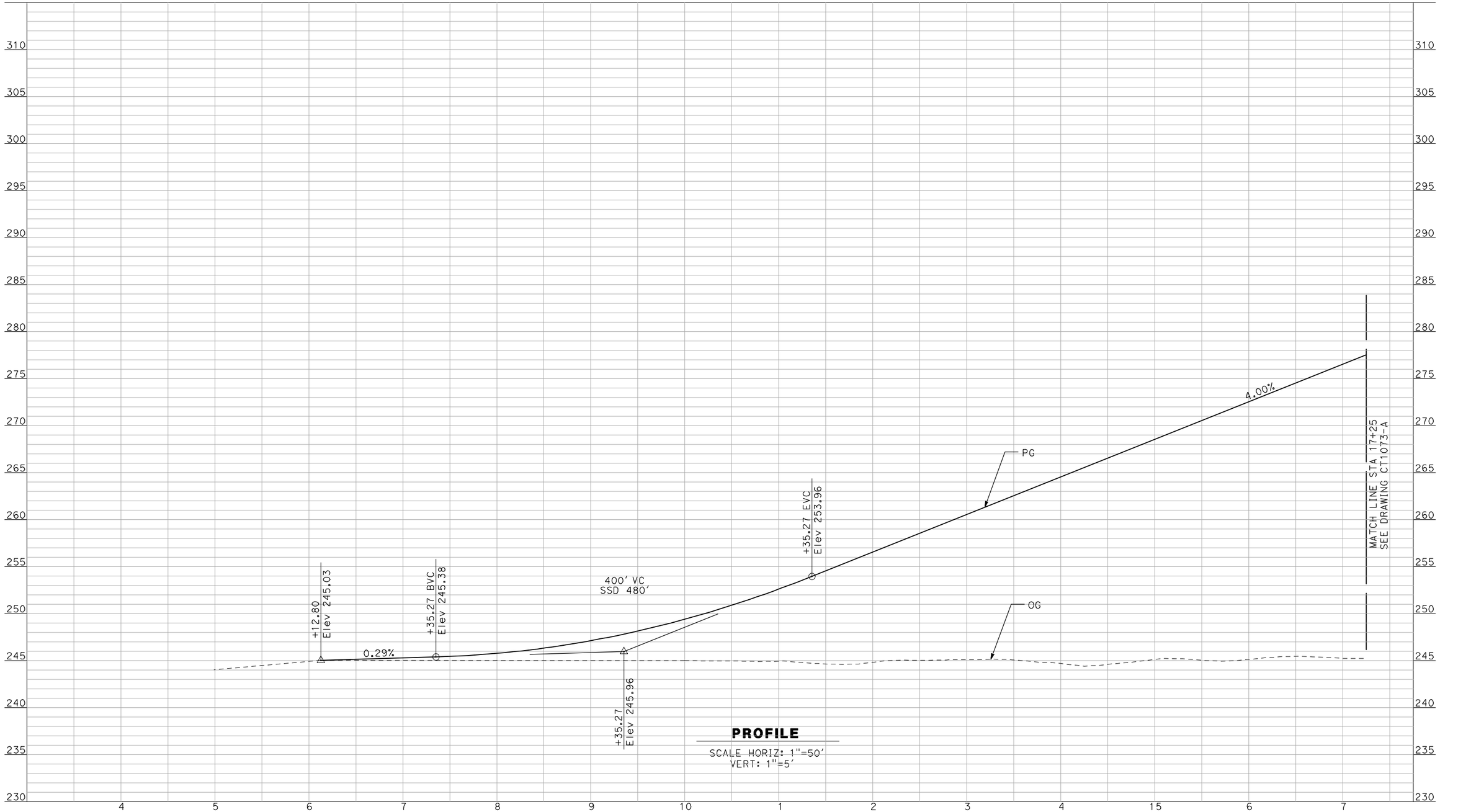
CH2MHILL

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
UNDERPASS - ROAD 22
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1071-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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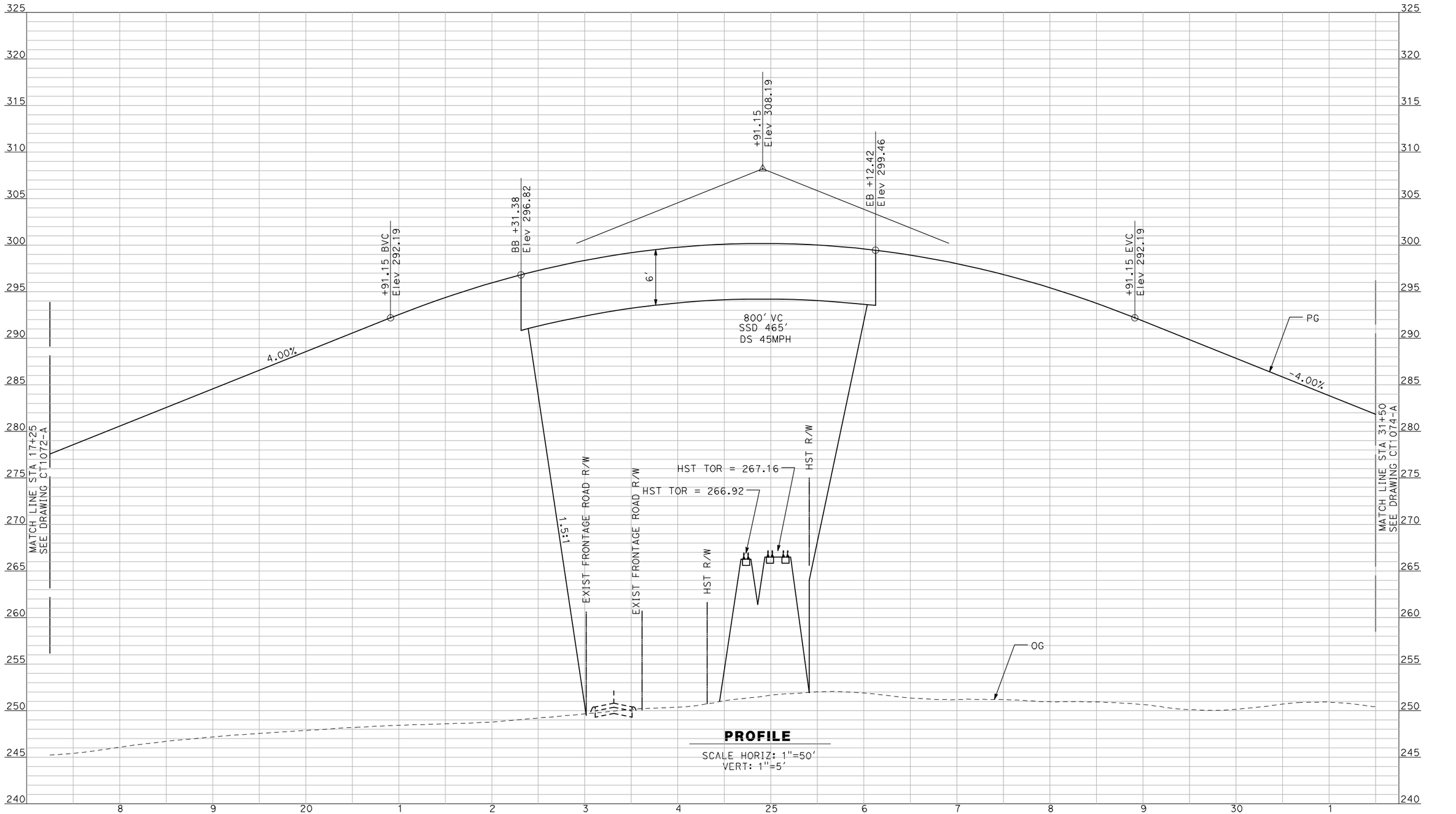
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 20
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1072-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

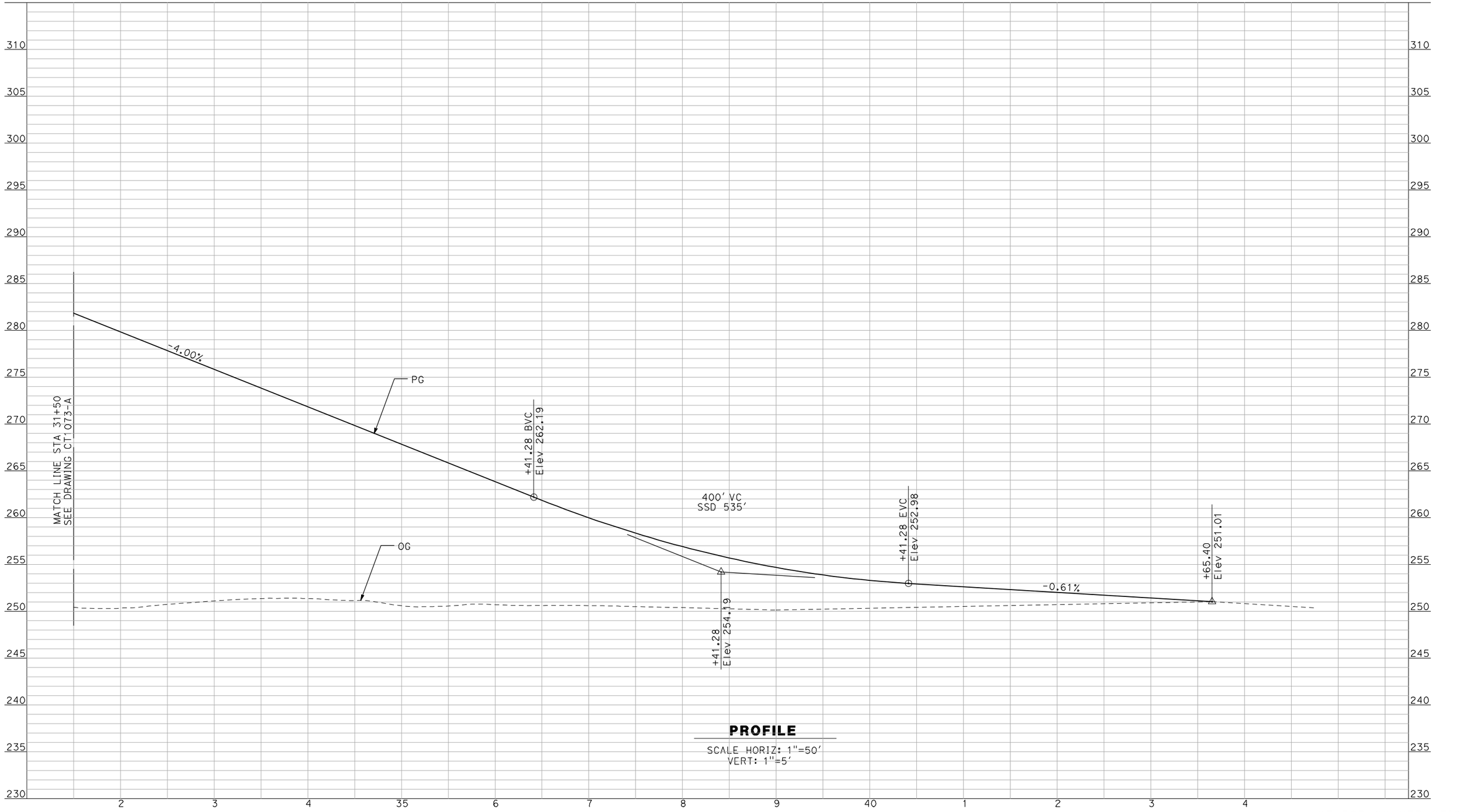
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 20
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1073-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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4/29/2011 2:06:18 PM
GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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CH2MHILL

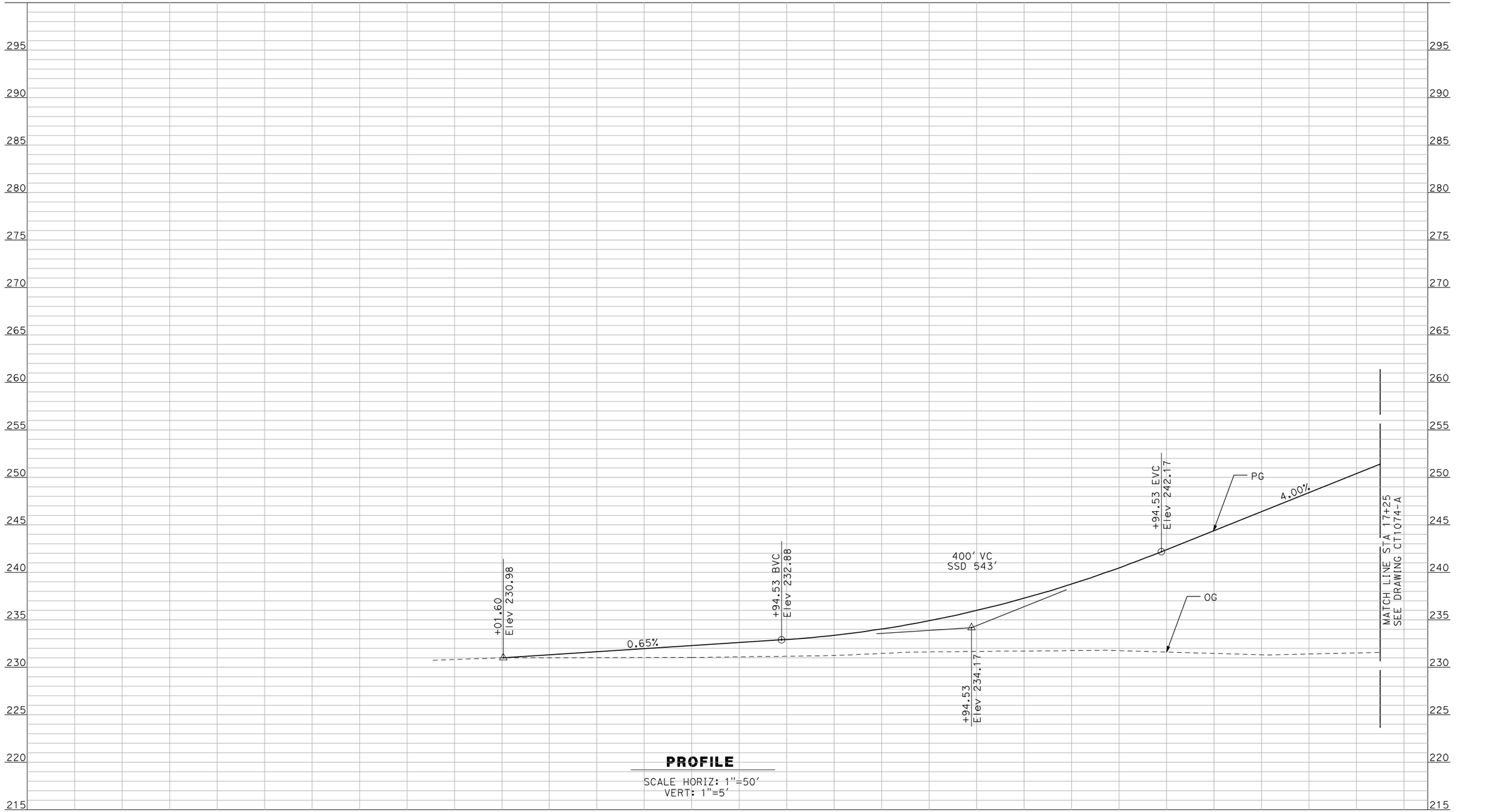
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 20
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1074-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
CH2MHILL

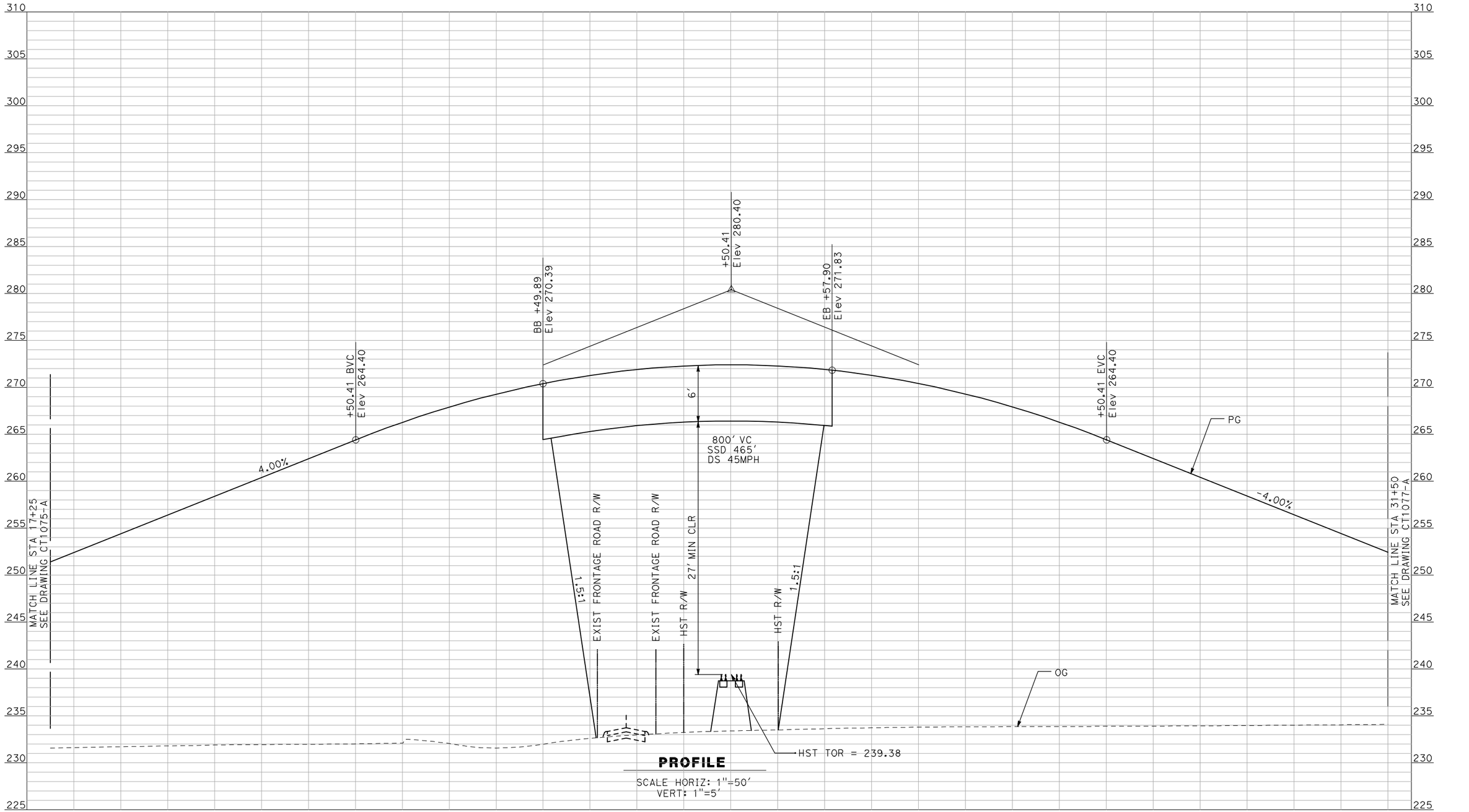
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 18 1/2
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1075-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

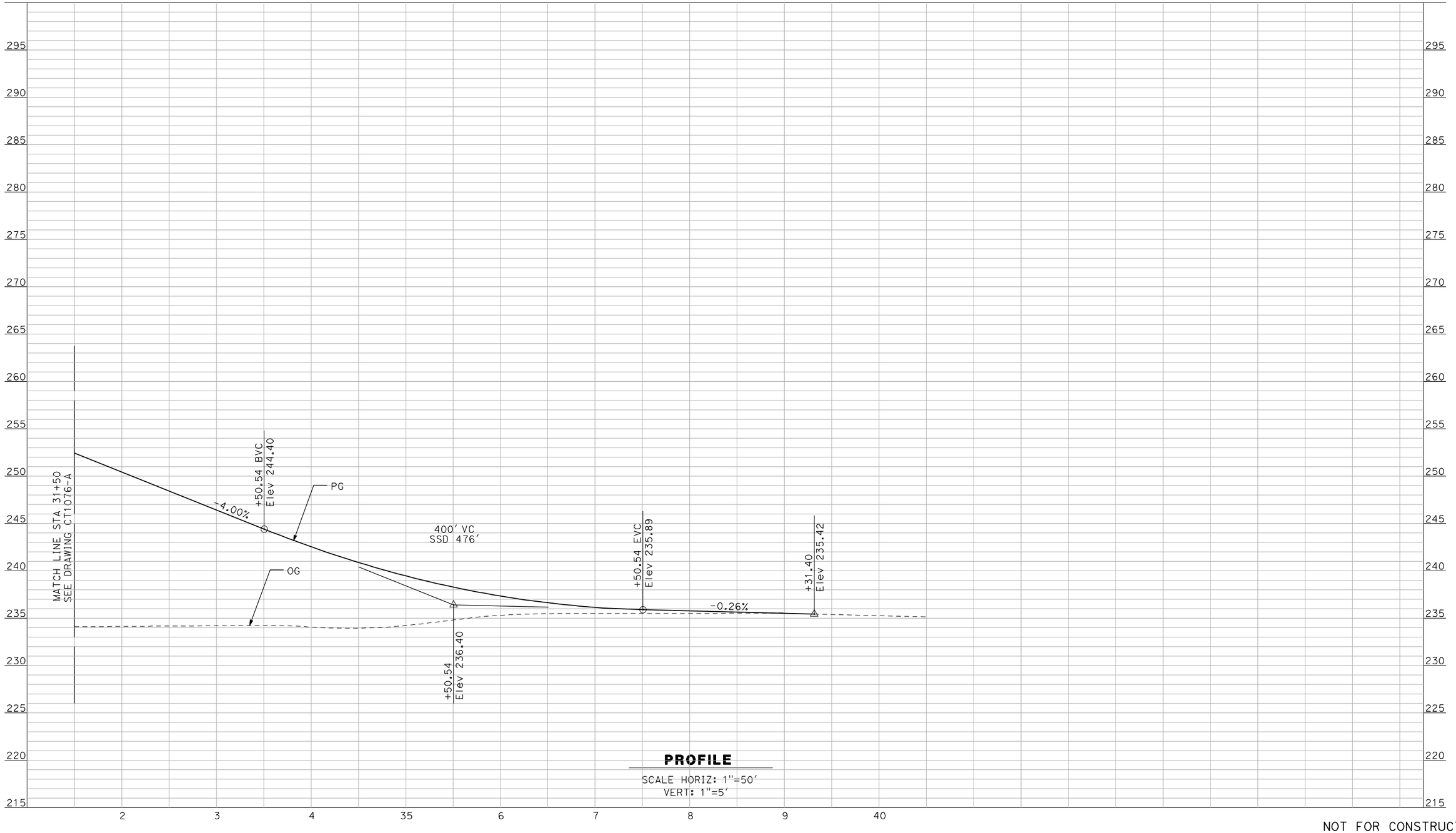
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 18 1/2
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1076-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

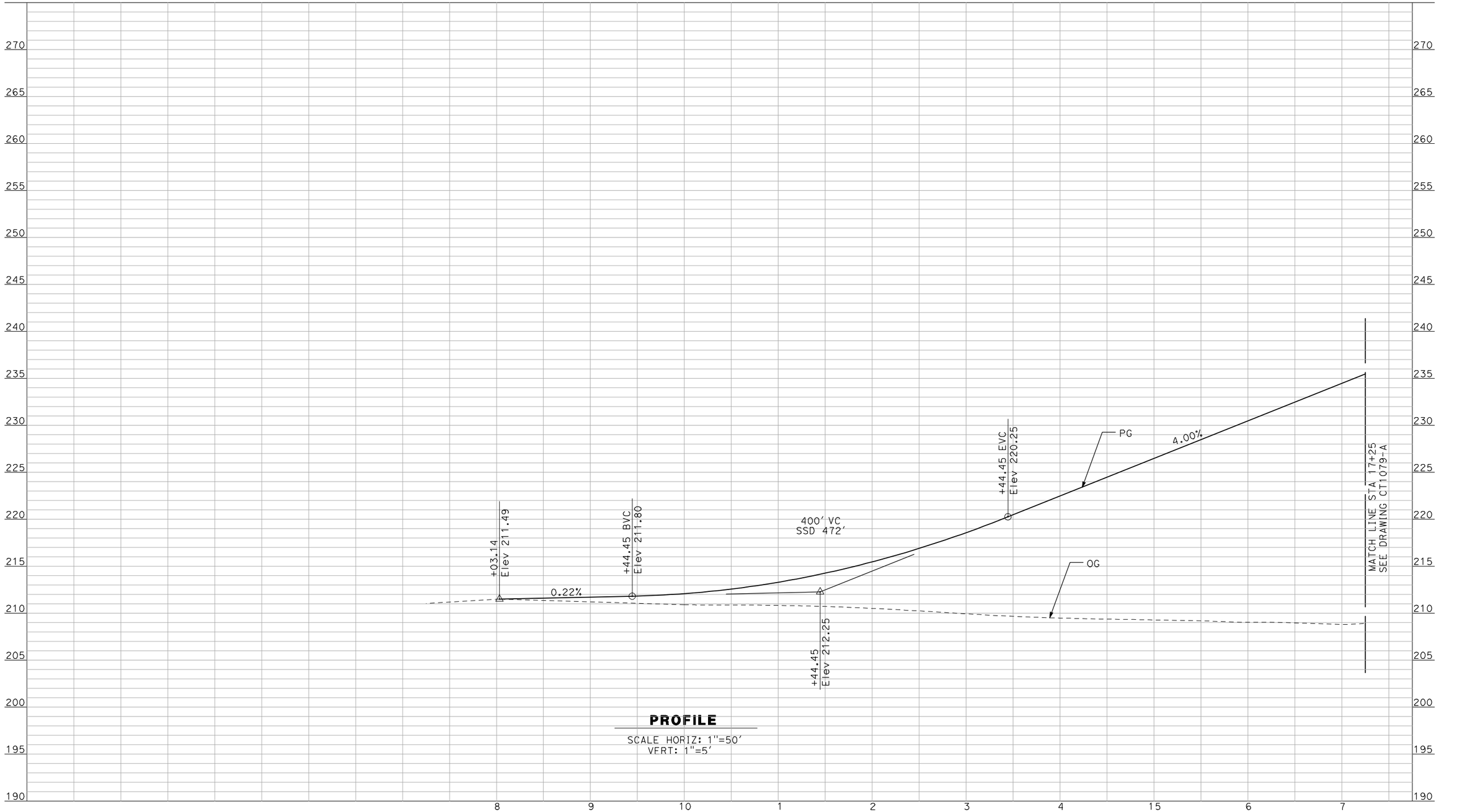
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 18 1/2
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1077-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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4/29/2011 2:06:32 PM
GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

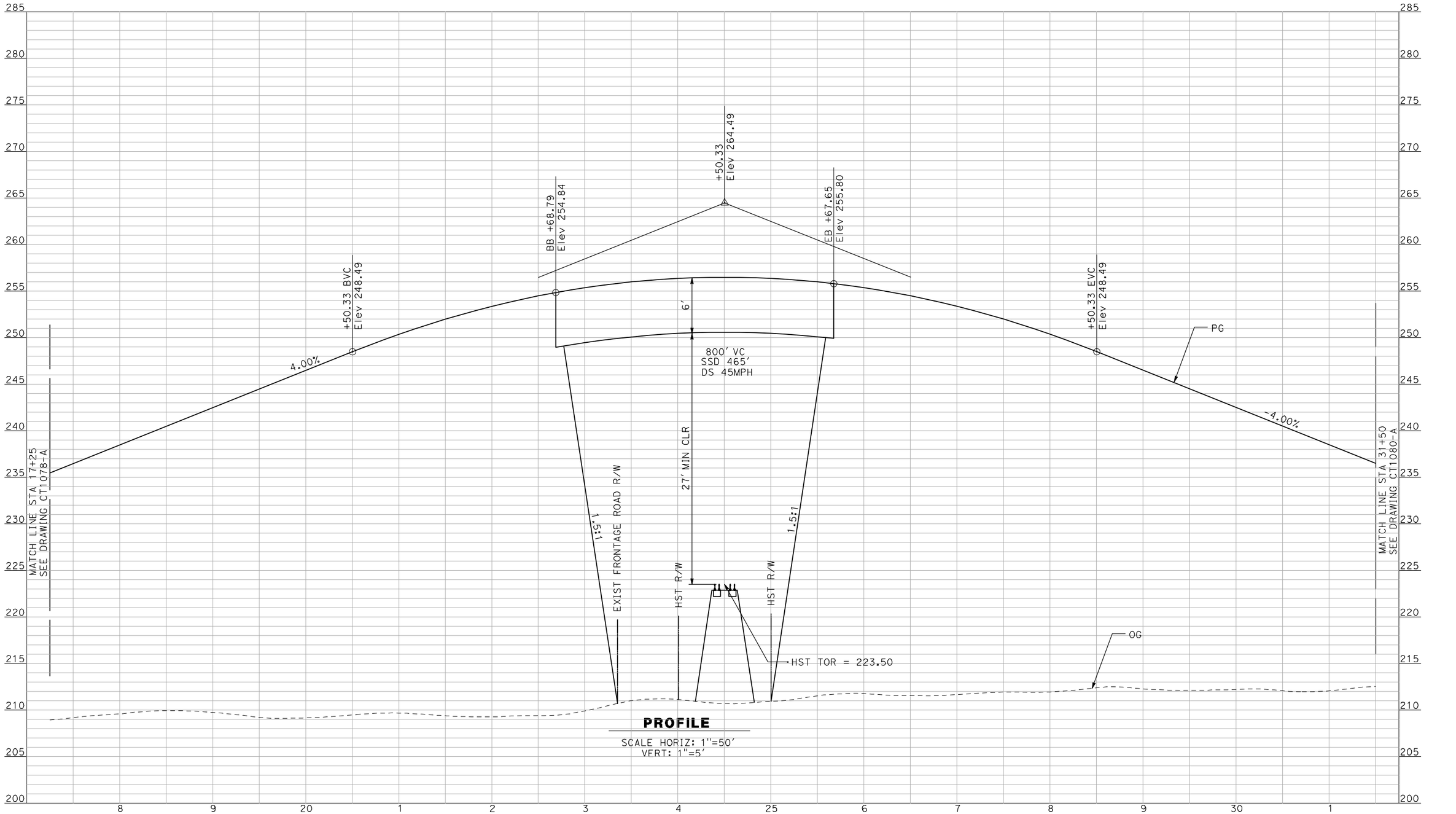
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 16
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1078-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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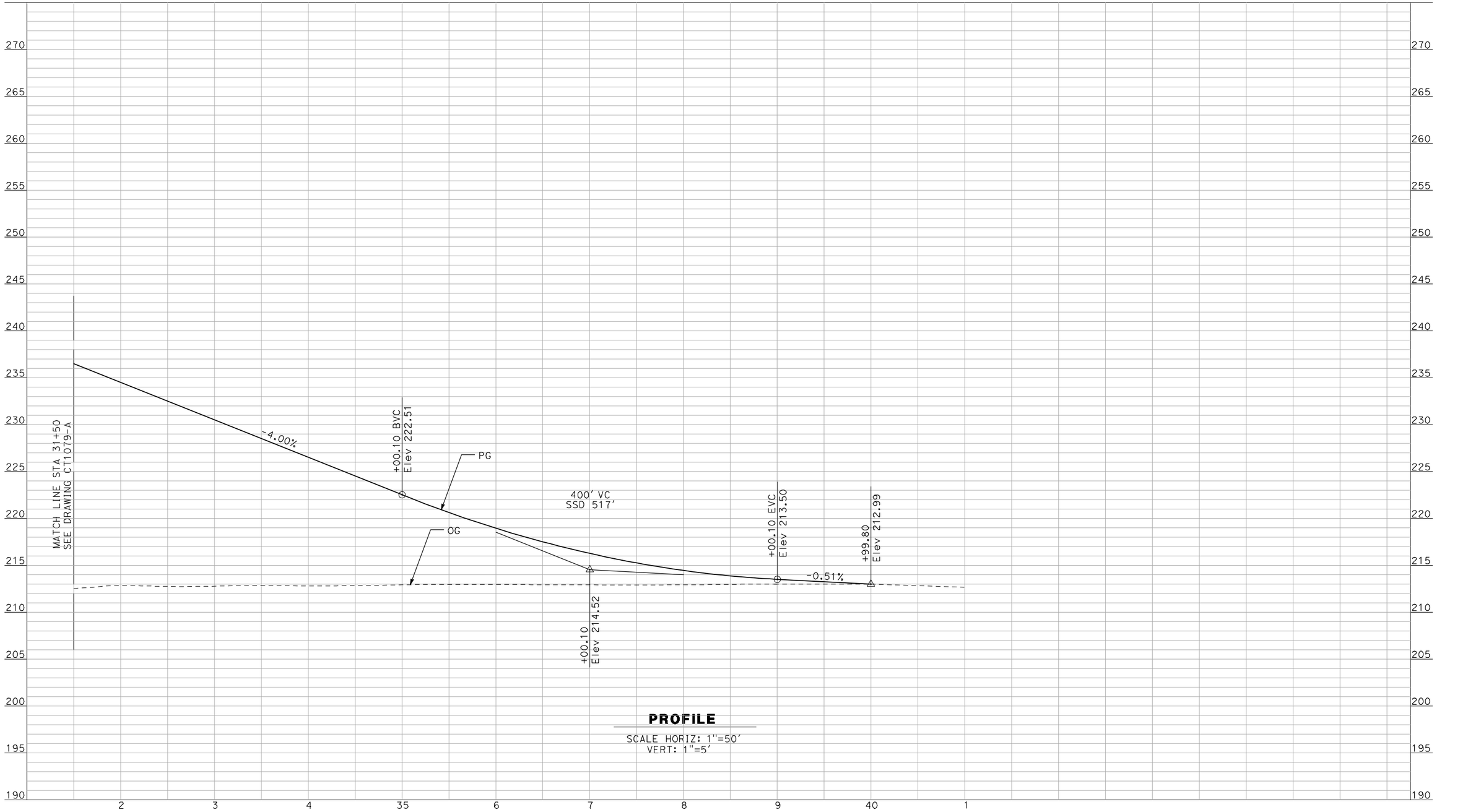
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 16
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1079-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - ROAD 16
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1080-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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GibsonR1

355 350 345 340 335 330 325 320 315 310 305 300 295 290 285 280 275 270

EX. UPRR BRIDGE LIMIT

+00.00 BVC
Elev 316.70
CONFORM

400' VC
SSD 324'

+00.00 EVC
Elev 320.99

4.00%

+74.05 BVC
Elev 323.95

BB +59.00
Elev 326.98

EB +15.00
Elev 331.64

+14.05
Elev 341.55

880' VC
SSD 459'

PG

6'

27' MIN CLR

1.5:1

HST R/W

HST R/W

1.5:1

+00.00
Elev 312.99

OG

HST TOR = 296.62

MATCH LINE STA 23+00
SEE DRAWING CT1147-A

9 10 1 2 3 4 15 6 7 8 9 20 1 2 3

**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

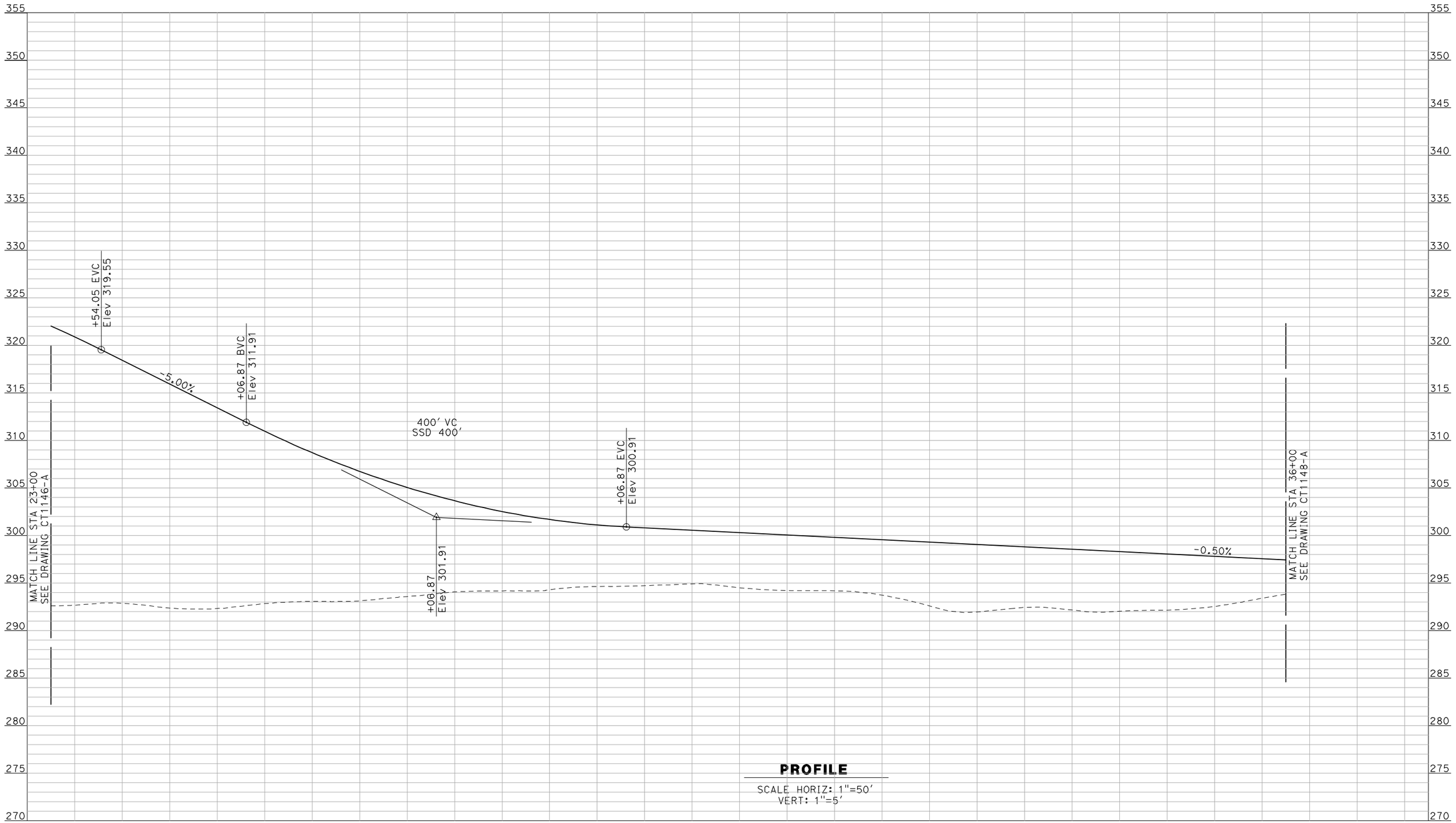
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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 7
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1146-A
SCALE AS SHOWN
SHEET NO. OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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CH2MHILL

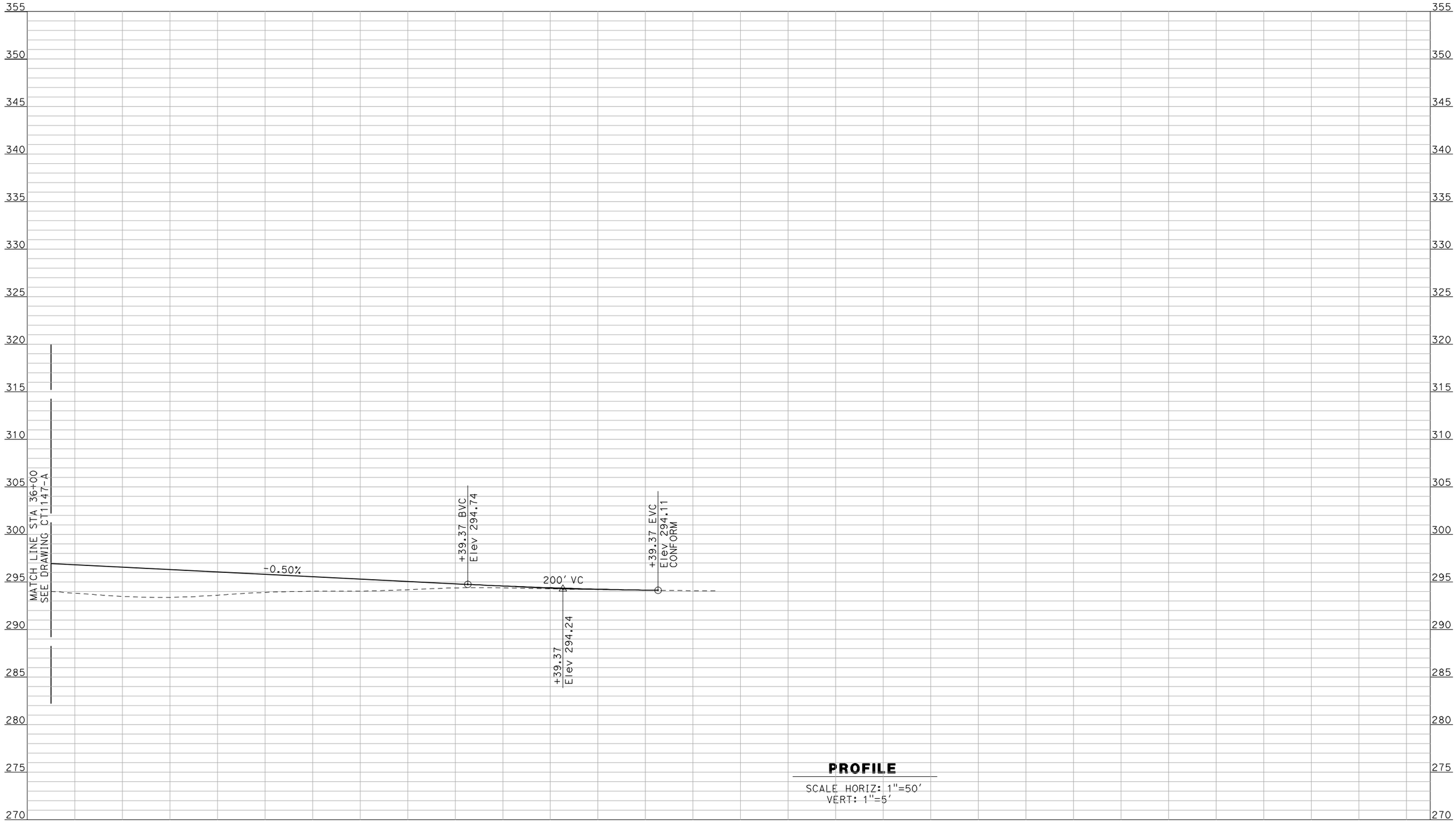
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 7
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1147-A
SCALE AS SHOWN
SHEET NO. OF ###

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GibsonR1

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
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**NOT FOR CONSTRUCTION**

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CH2MHILL

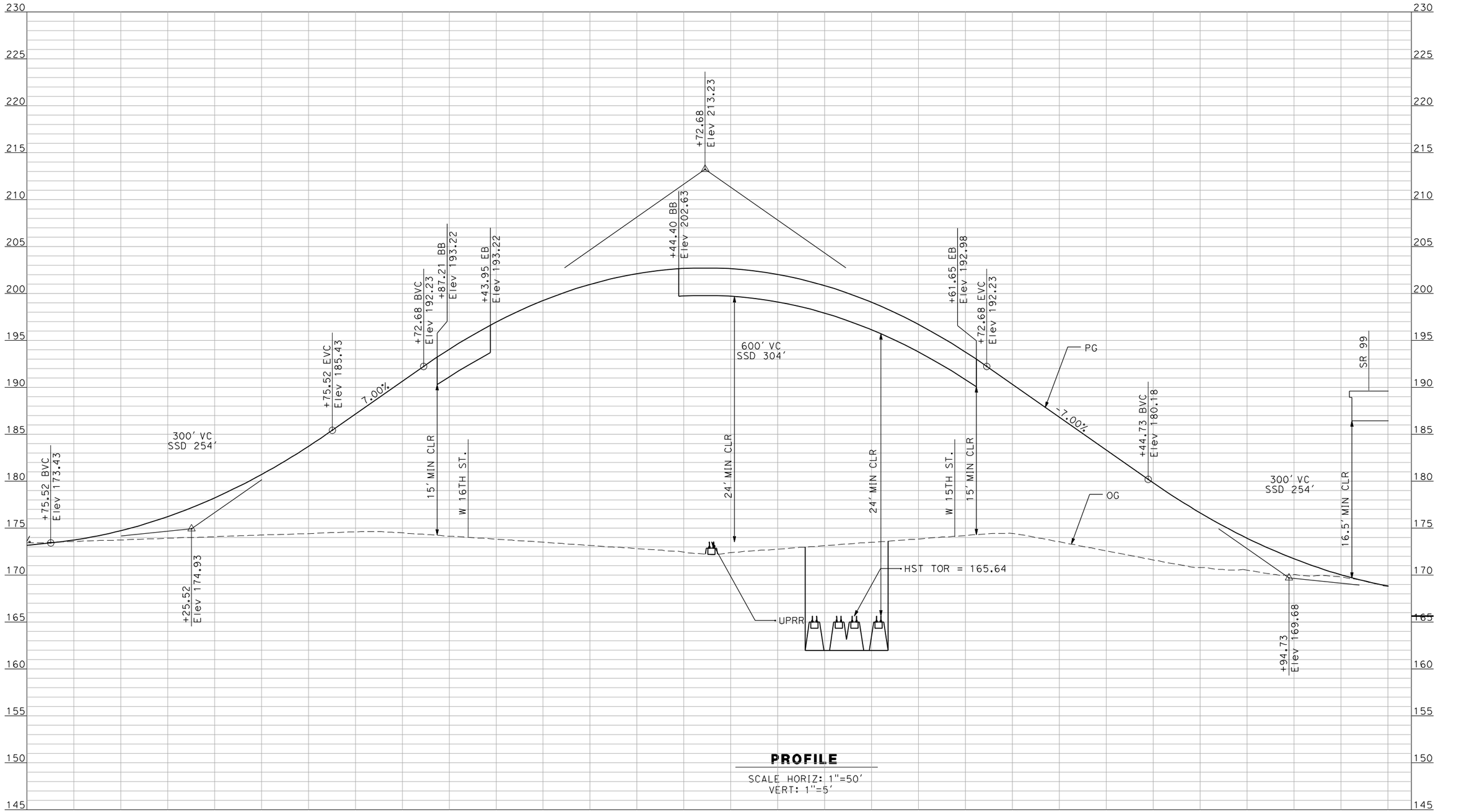
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 7
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1148-A
SCALE AS SHOWN
SHEET NO. OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 06/30/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

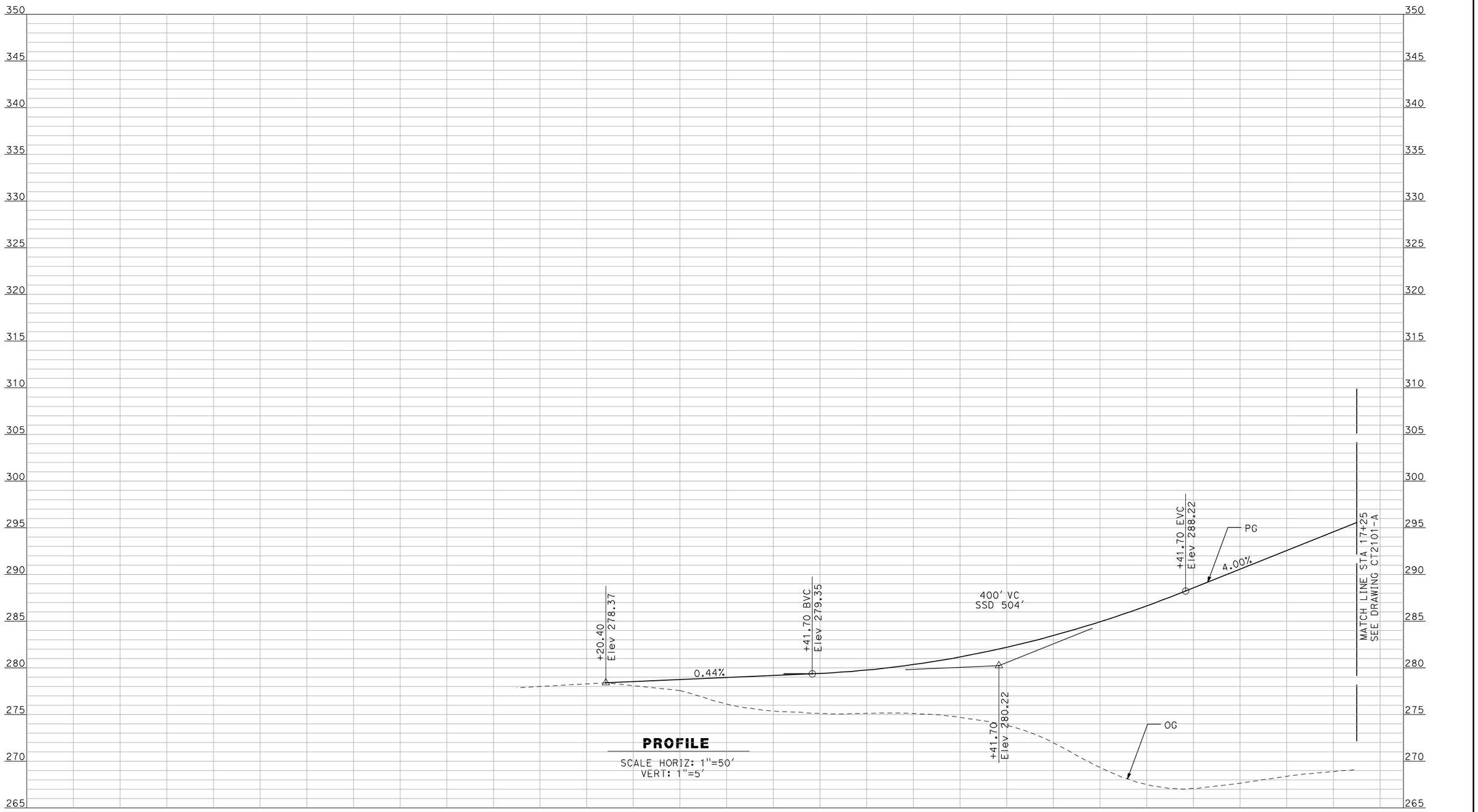
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - G Street
PROFILE
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. CT1149-A
SCALE AS SHOWN
SHEET NO. OF ###

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4/29/2011 2:39:12 PM
GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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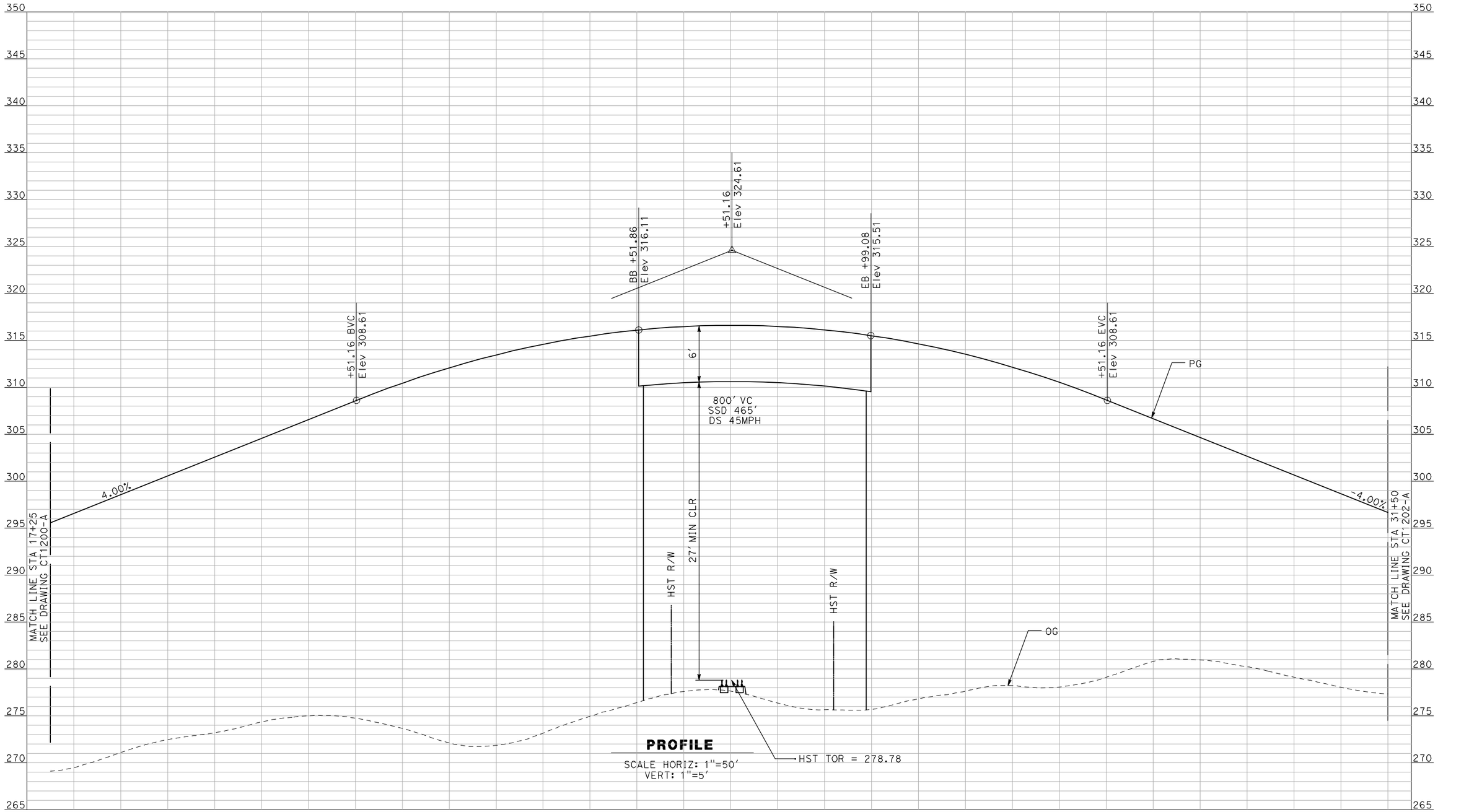
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. WHITE ROCK RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1200-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:39:15 PM
GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

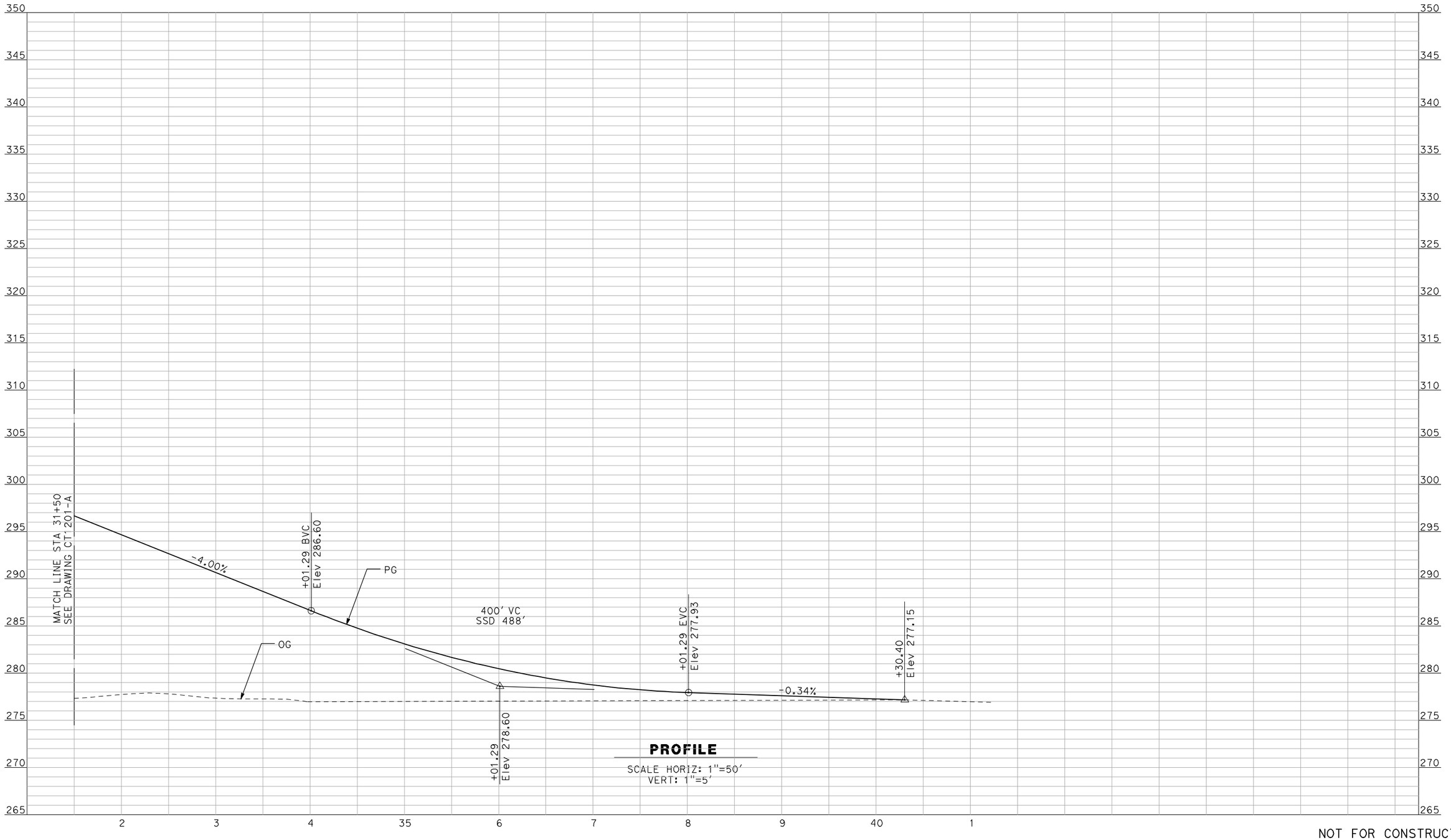
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. WHITE ROCK RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1201-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

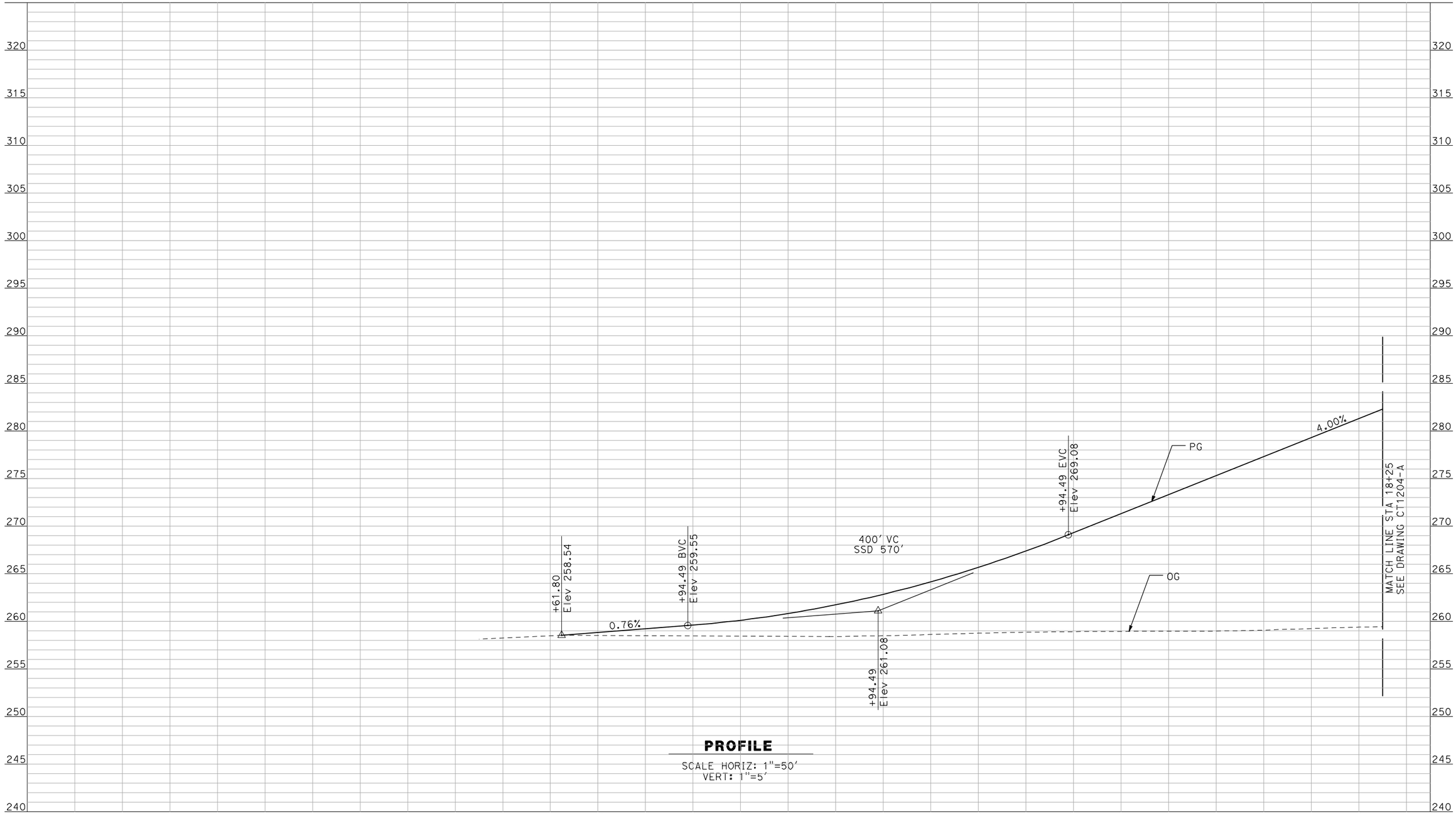
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. WHITE ROCK RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1202-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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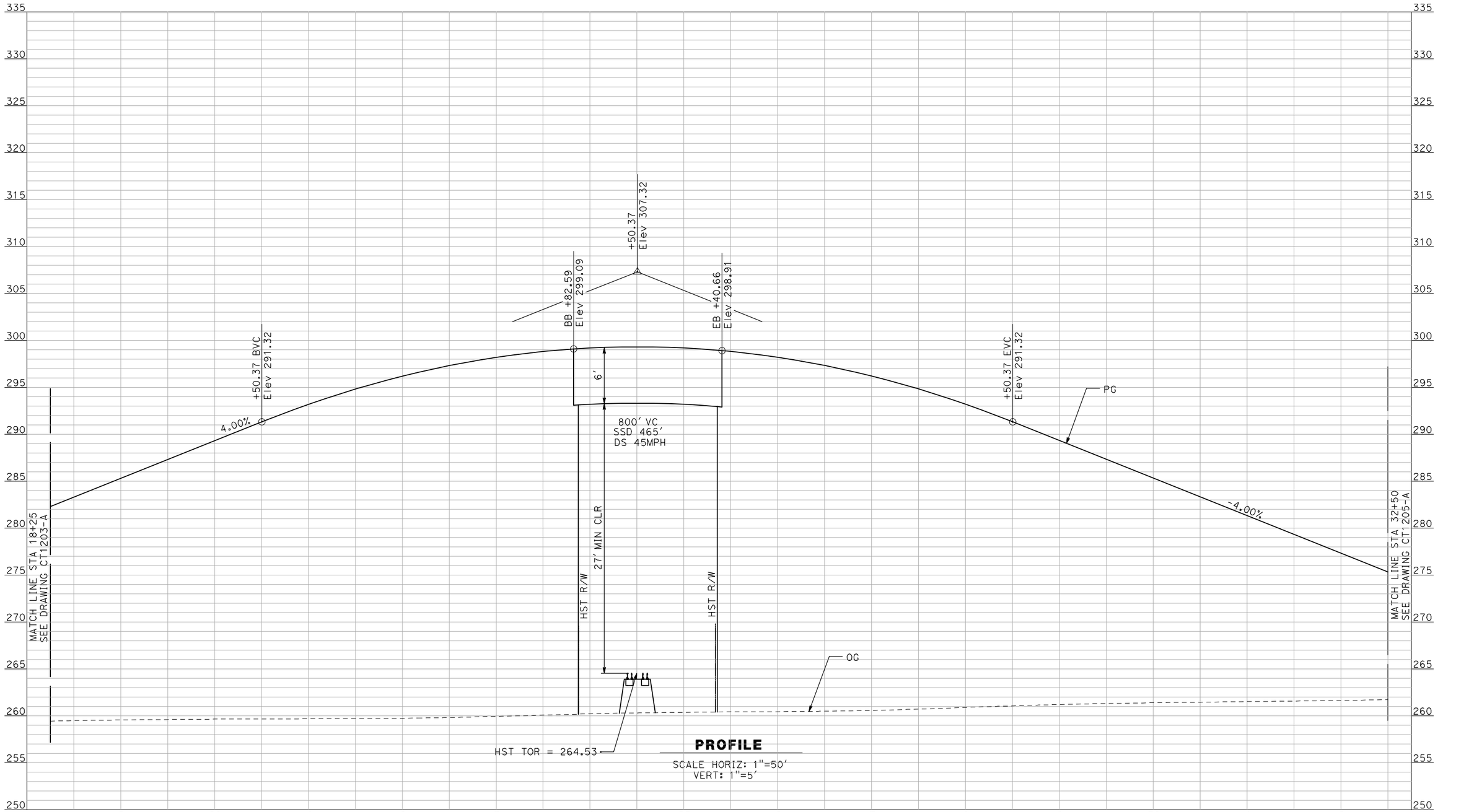
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1203-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|

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DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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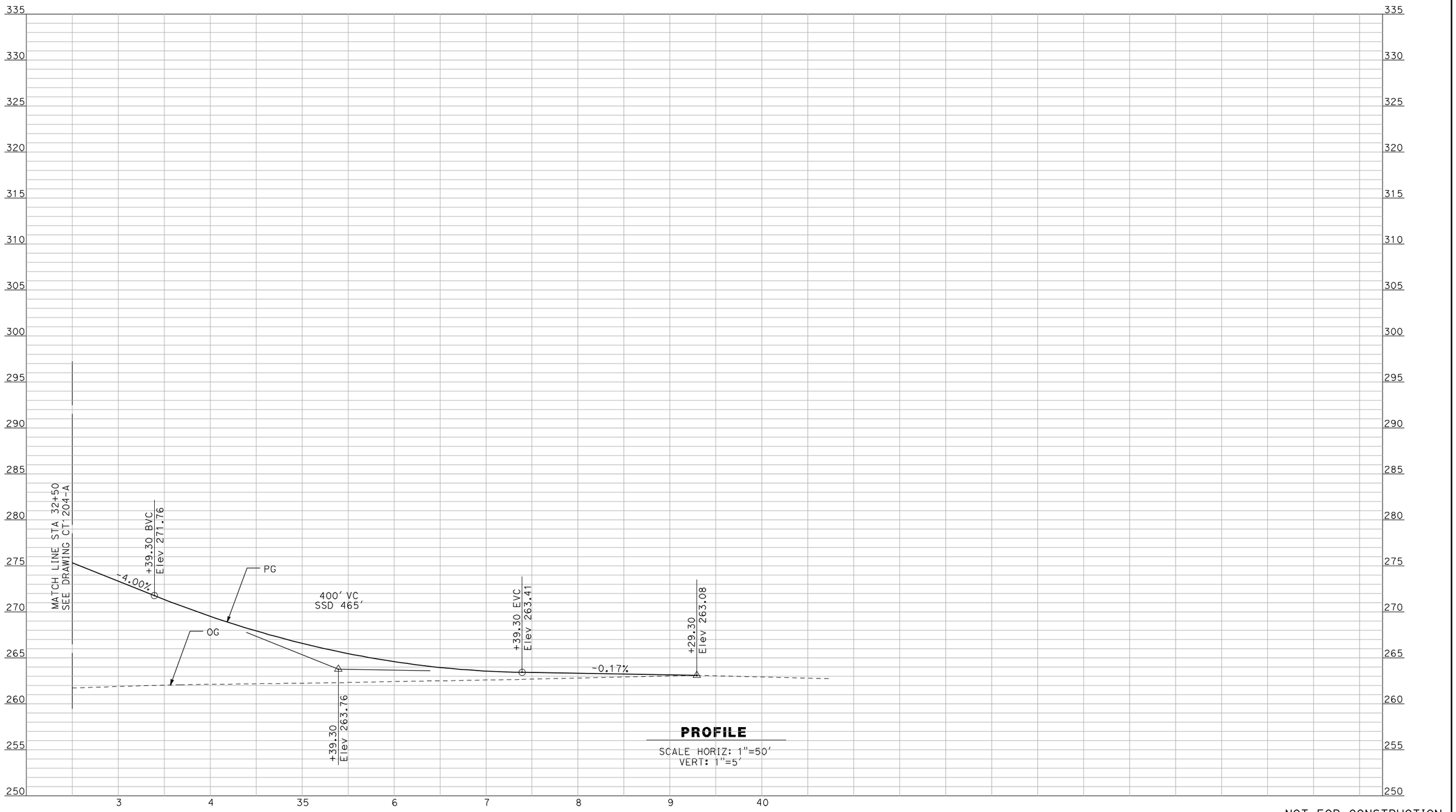
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1204-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

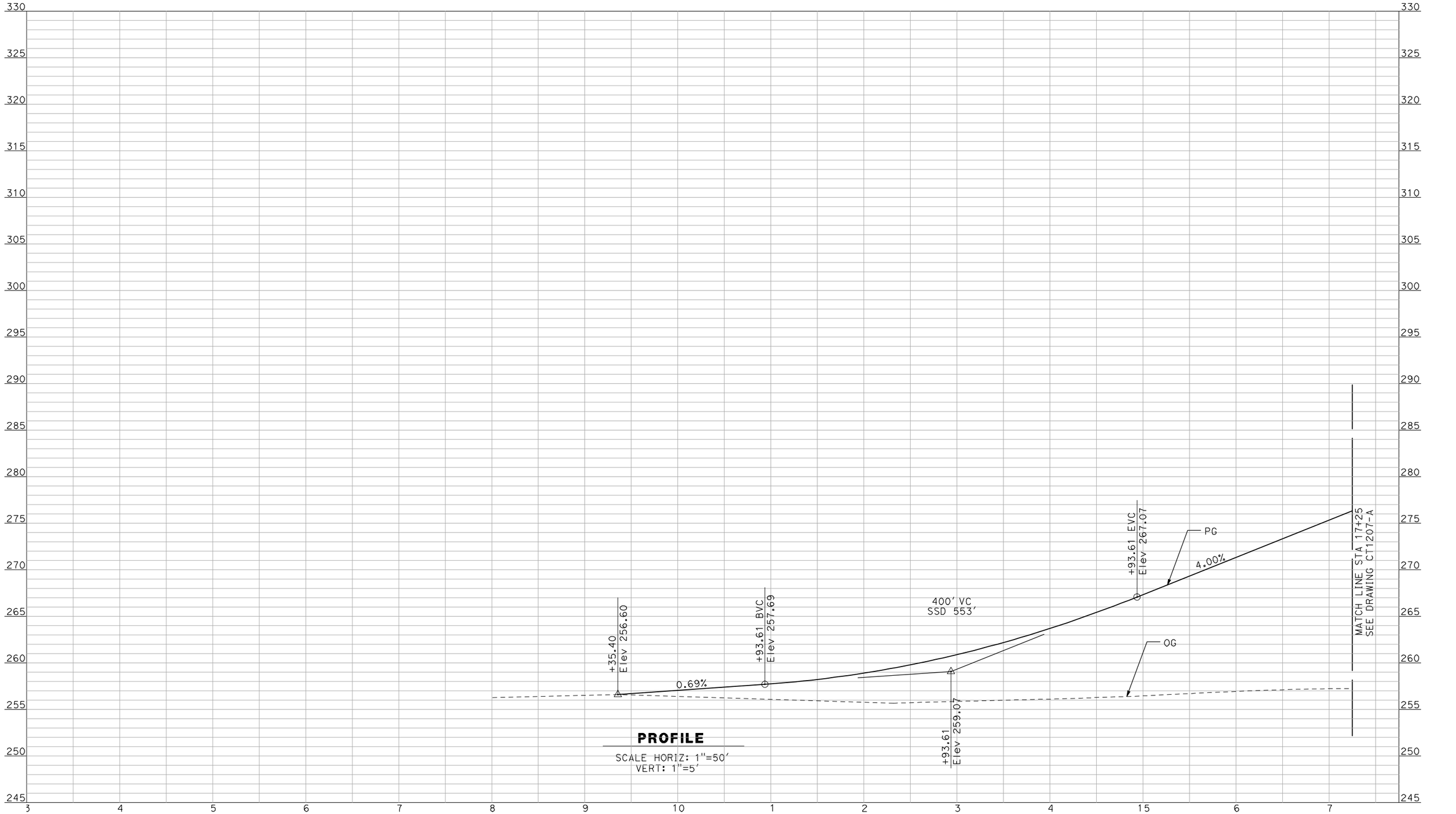
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1205-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DESIGNED BY: R. GIBSON
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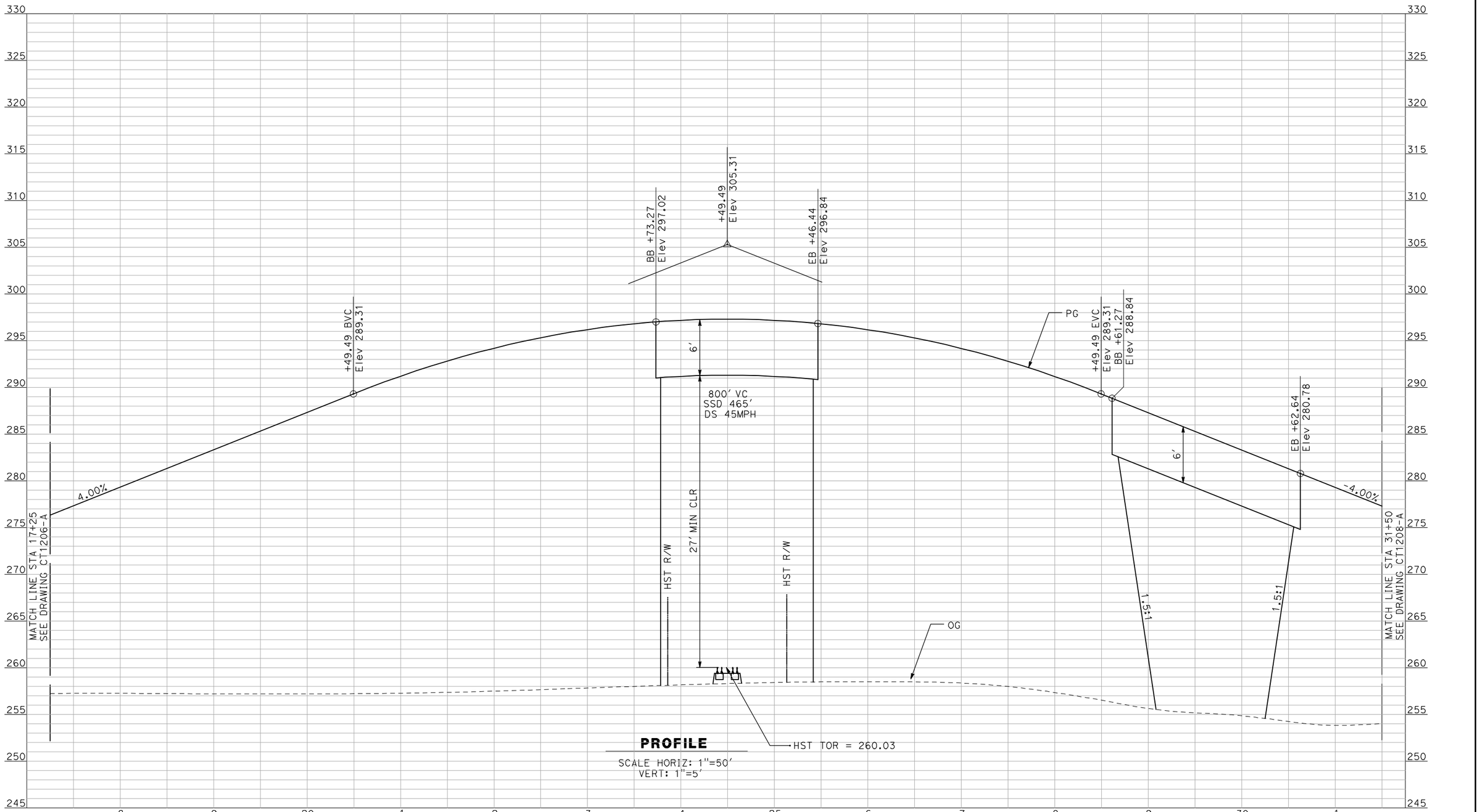
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - FRESNO RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1206-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

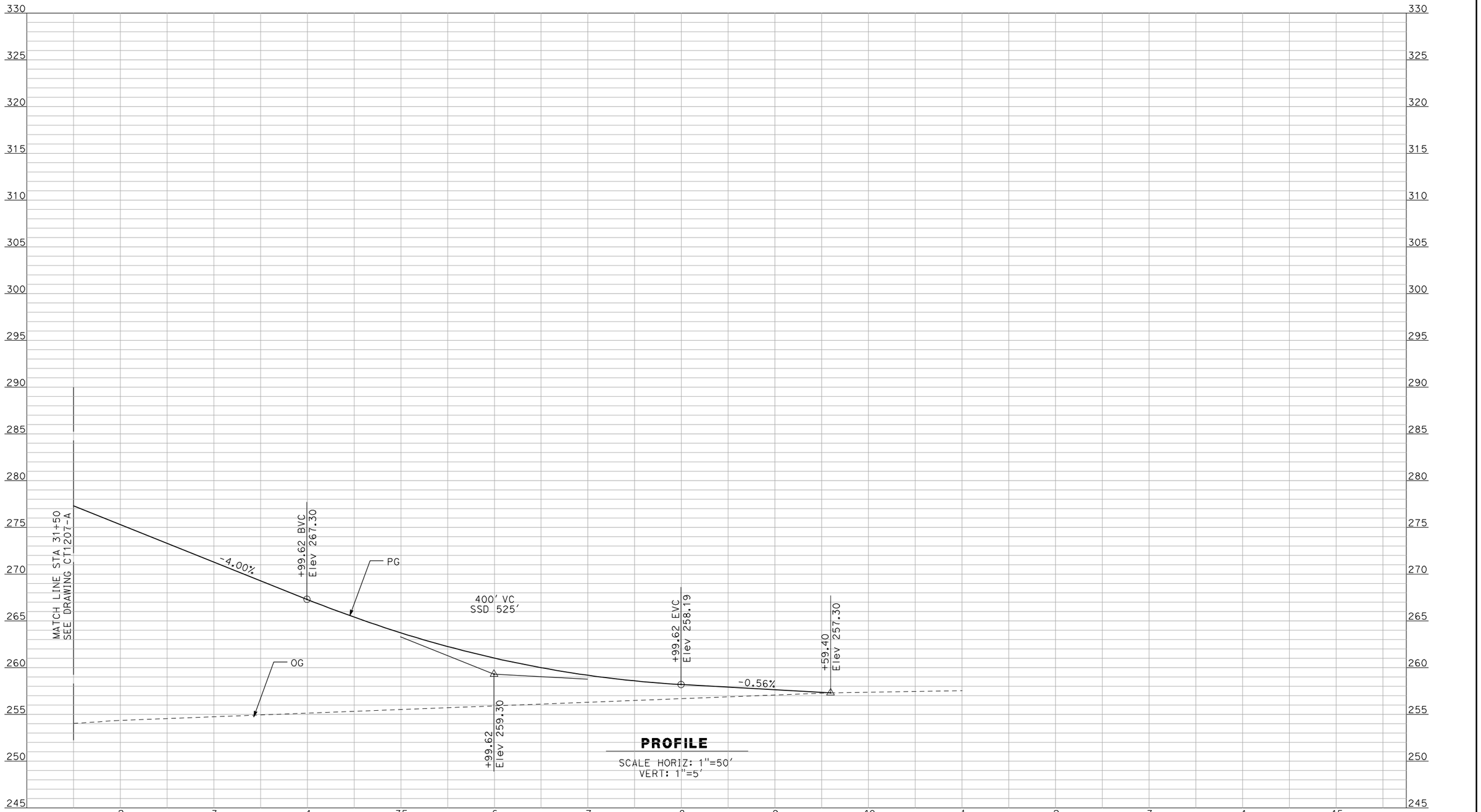
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - FRESNO RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1207-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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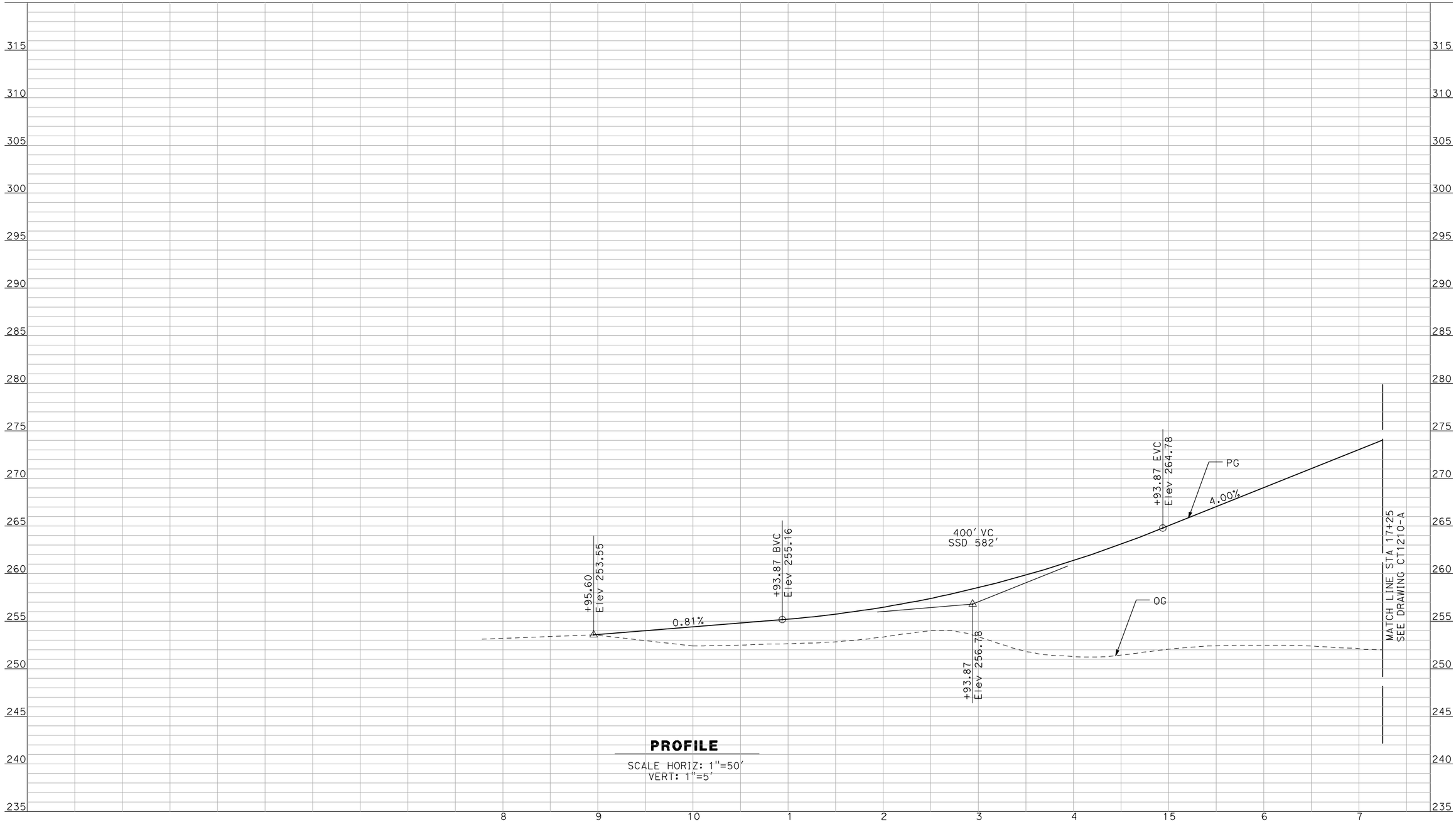
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - FRESNO RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1208-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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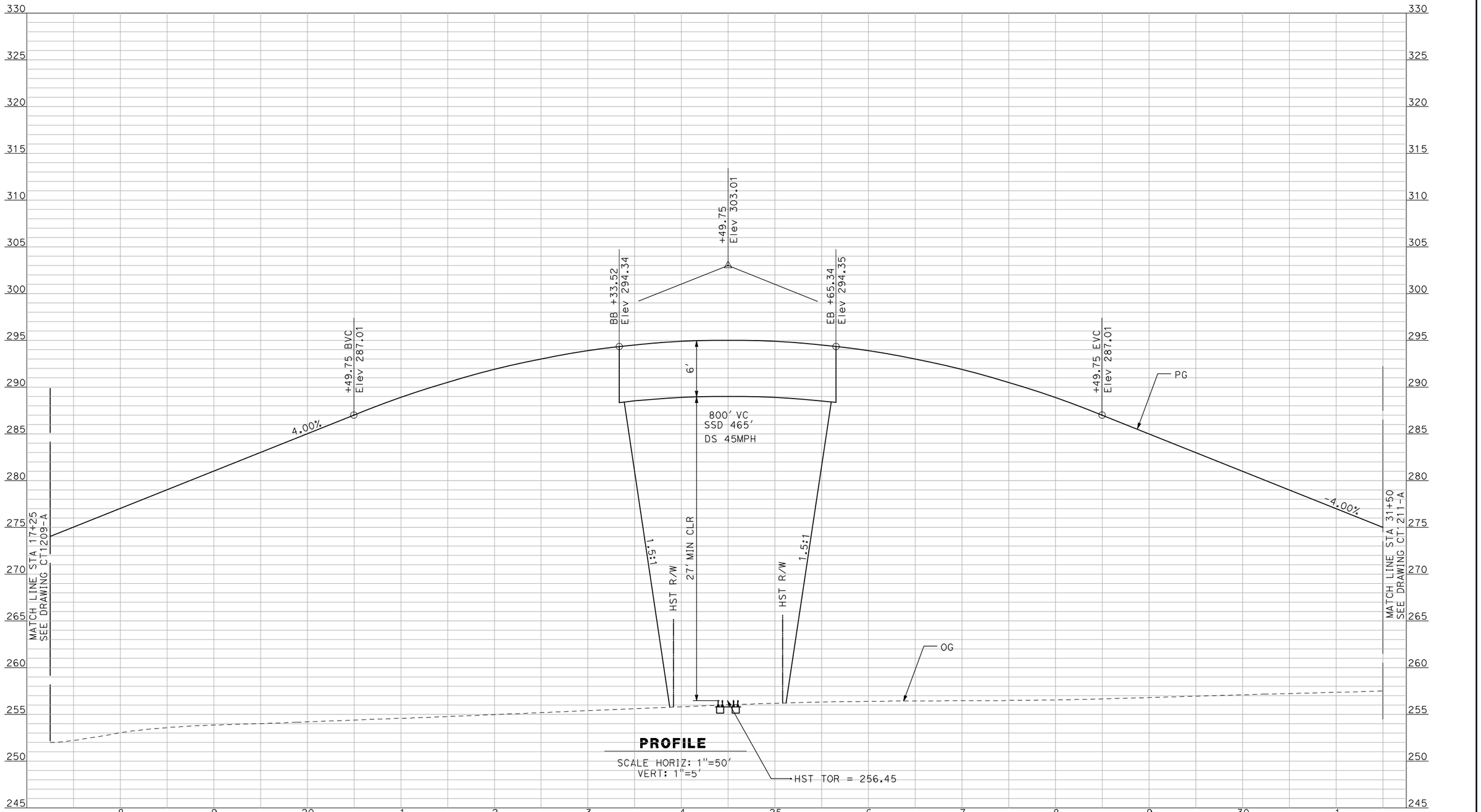
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - CUNNINGHAM RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1209-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

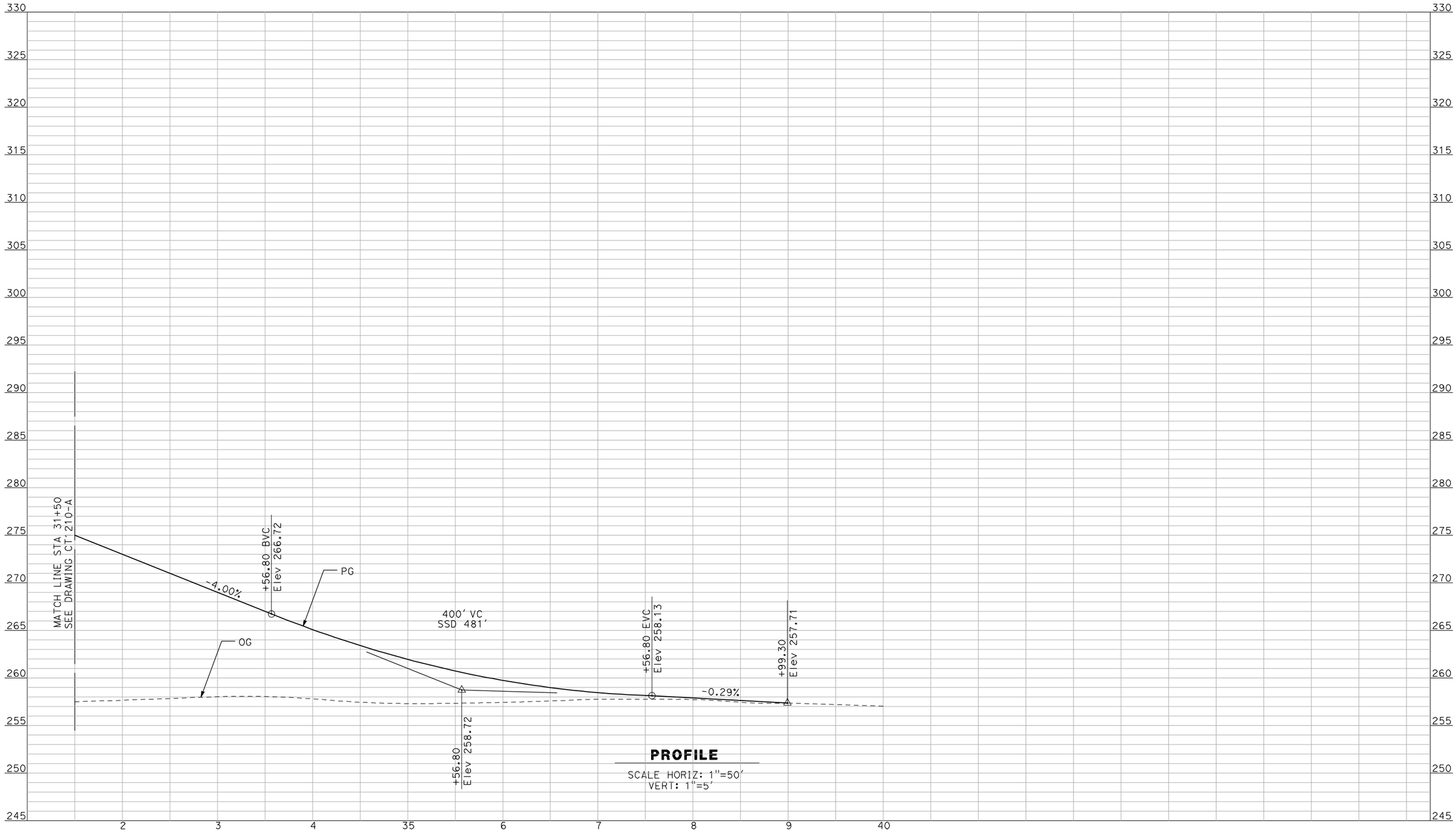
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - CUNNINGHAM RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1210-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|

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DRAWN BY: F. DEMARCO
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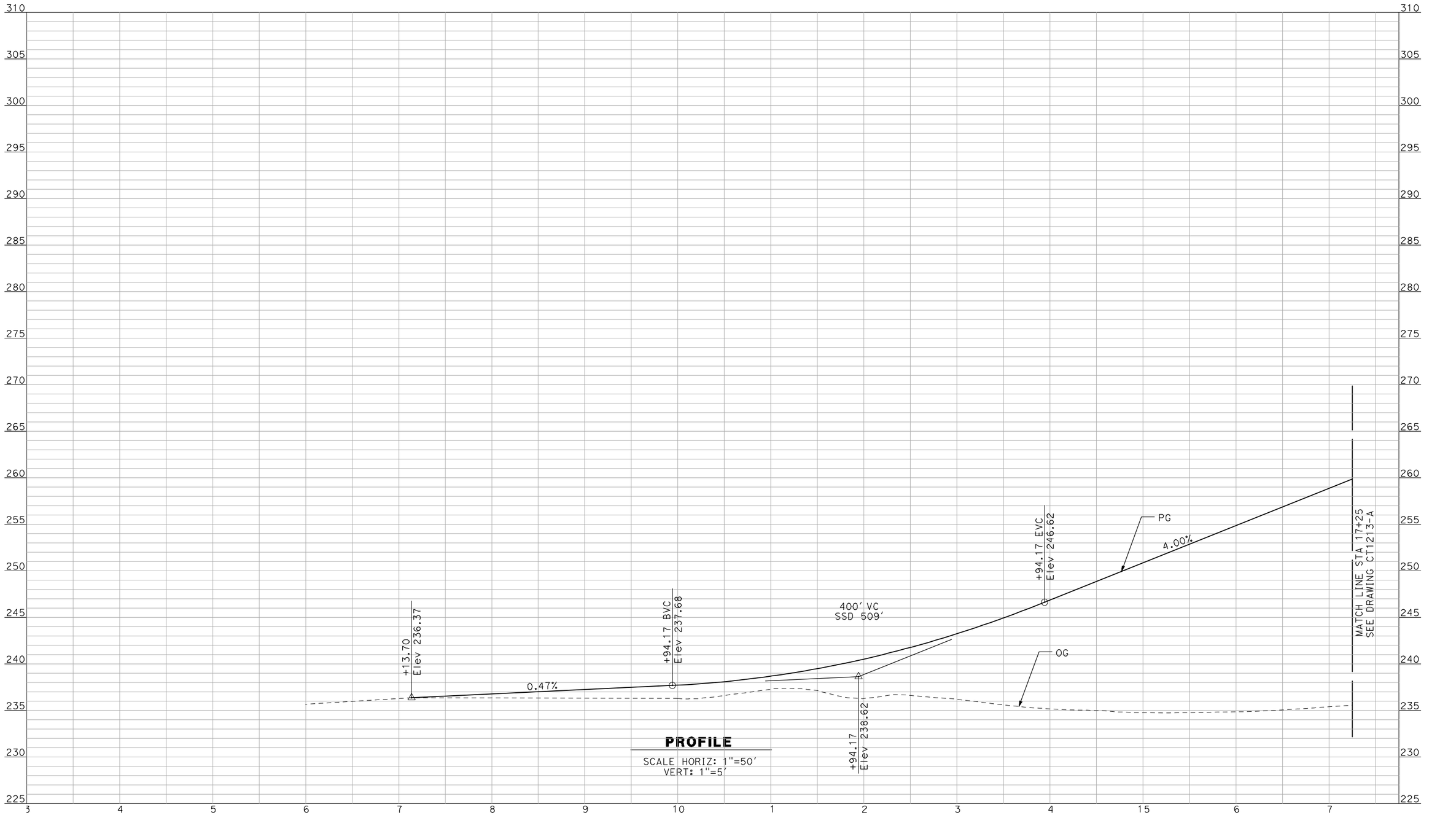
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - CUNNINGHAM RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1211-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY: F. DEMARCO
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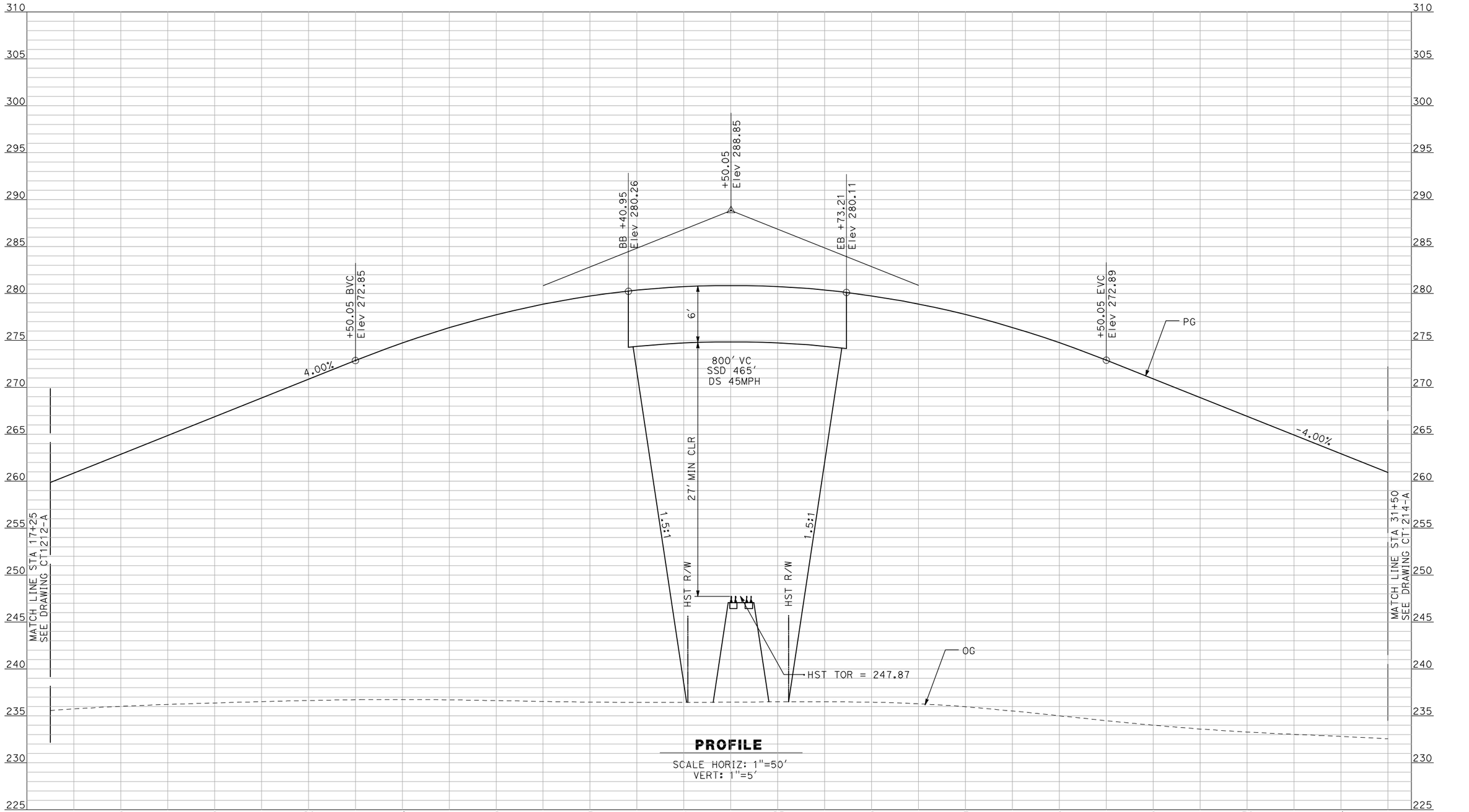
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1212-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DATE: 04/29/2011

**RECORD SET**
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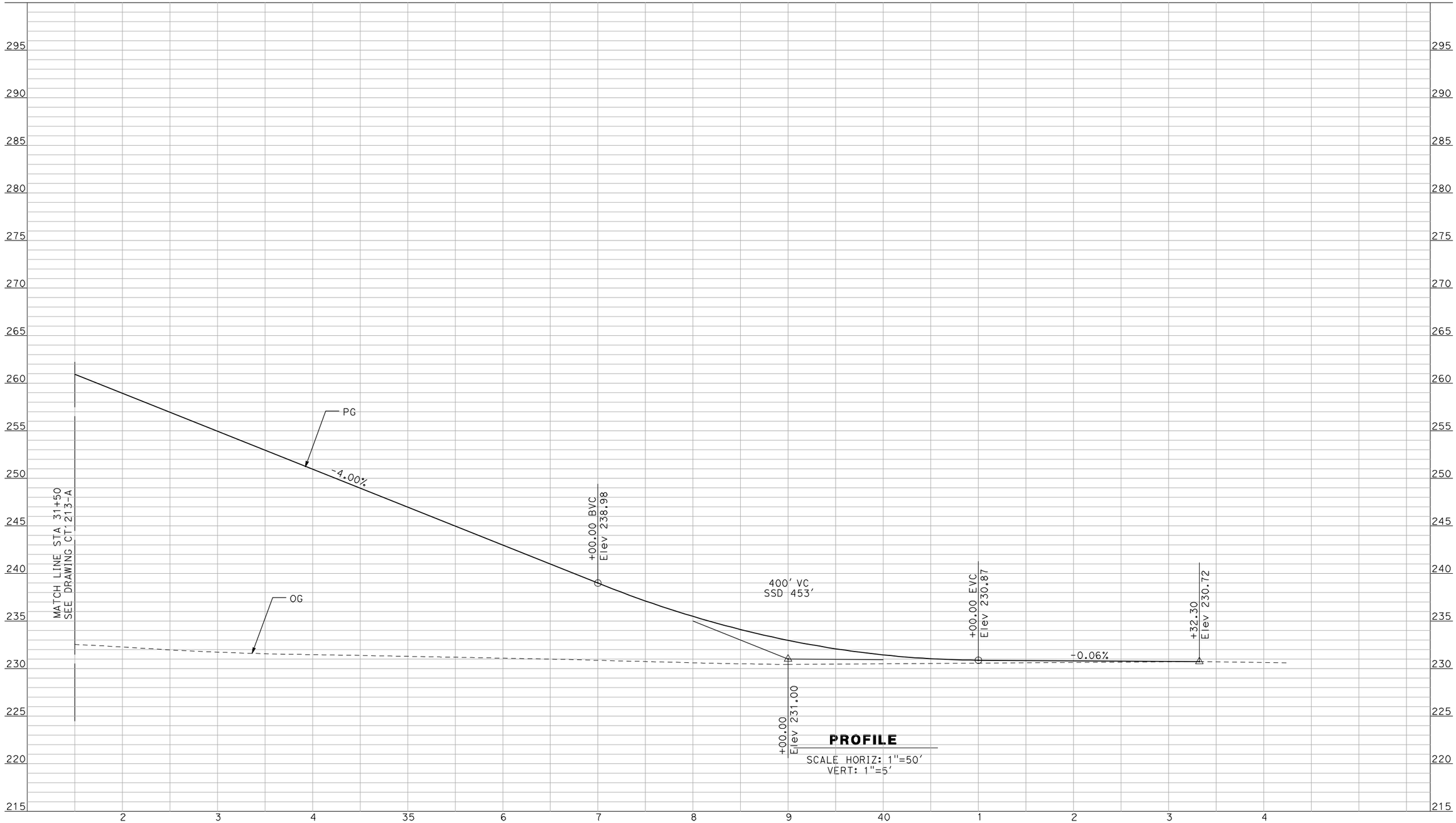
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1213-A
SCALE AS SHOWN
SHEET NO. ### OF ###




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DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

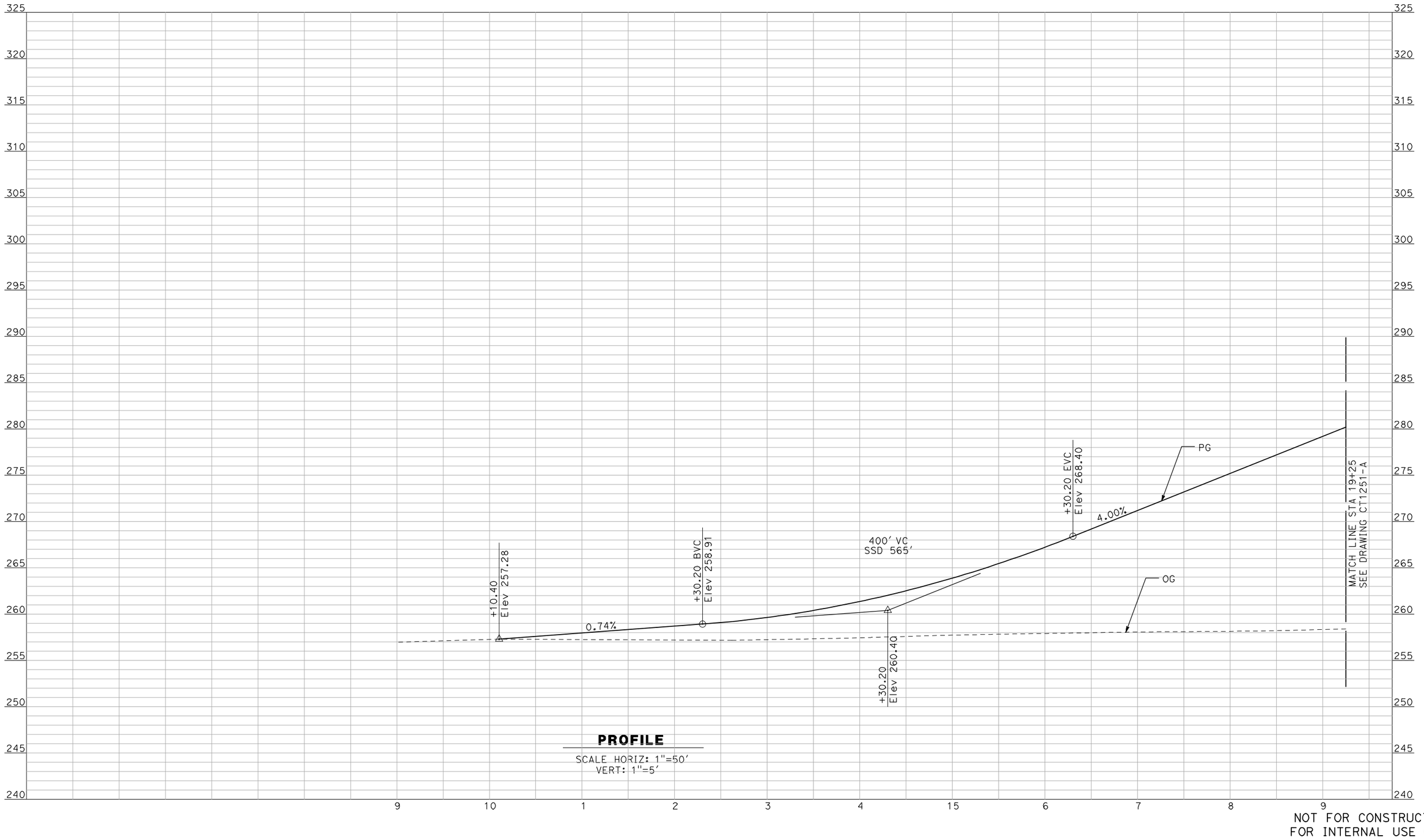
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - BURCHELL RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1214-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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4/29/2011 2:46:39 PM
GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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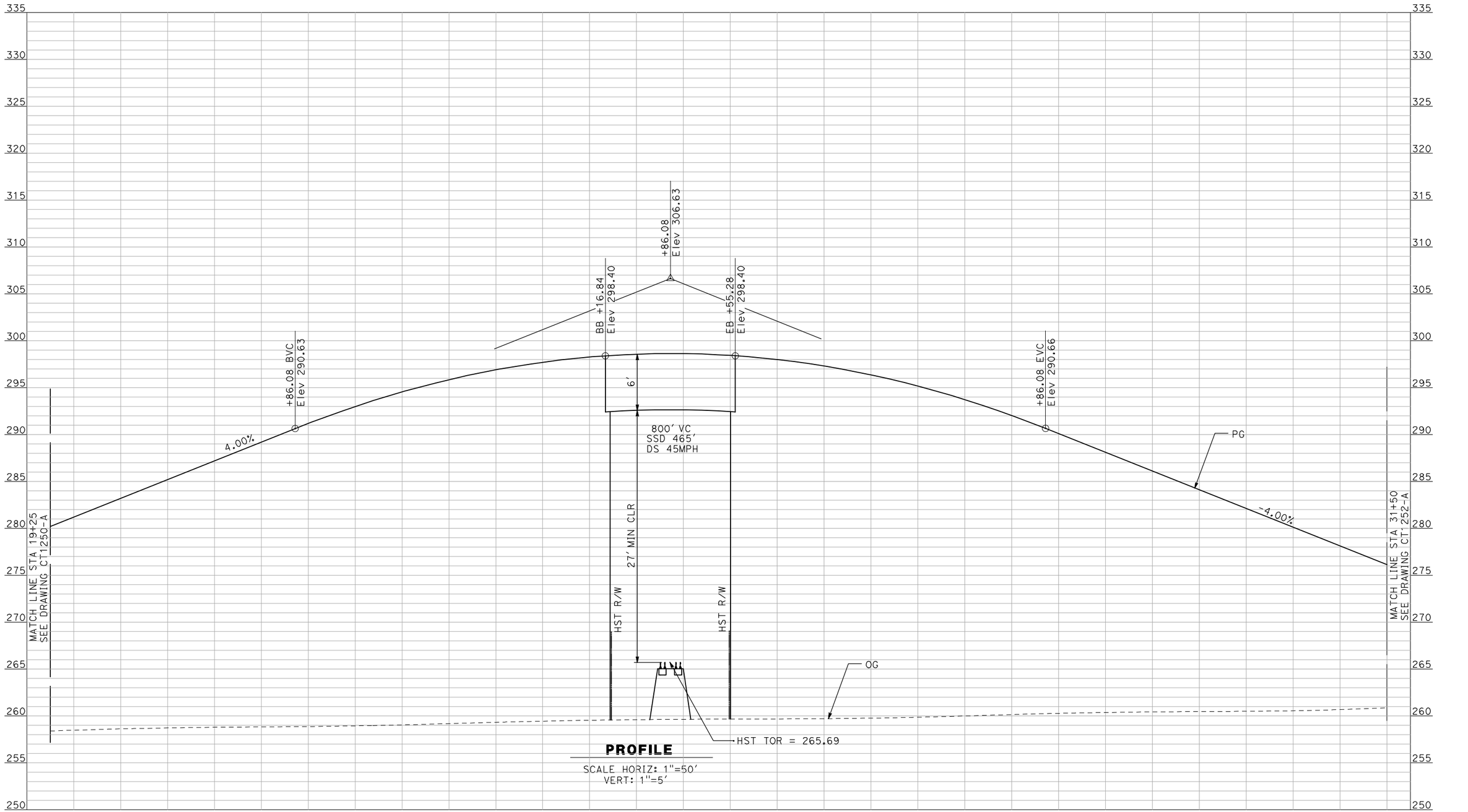
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1250-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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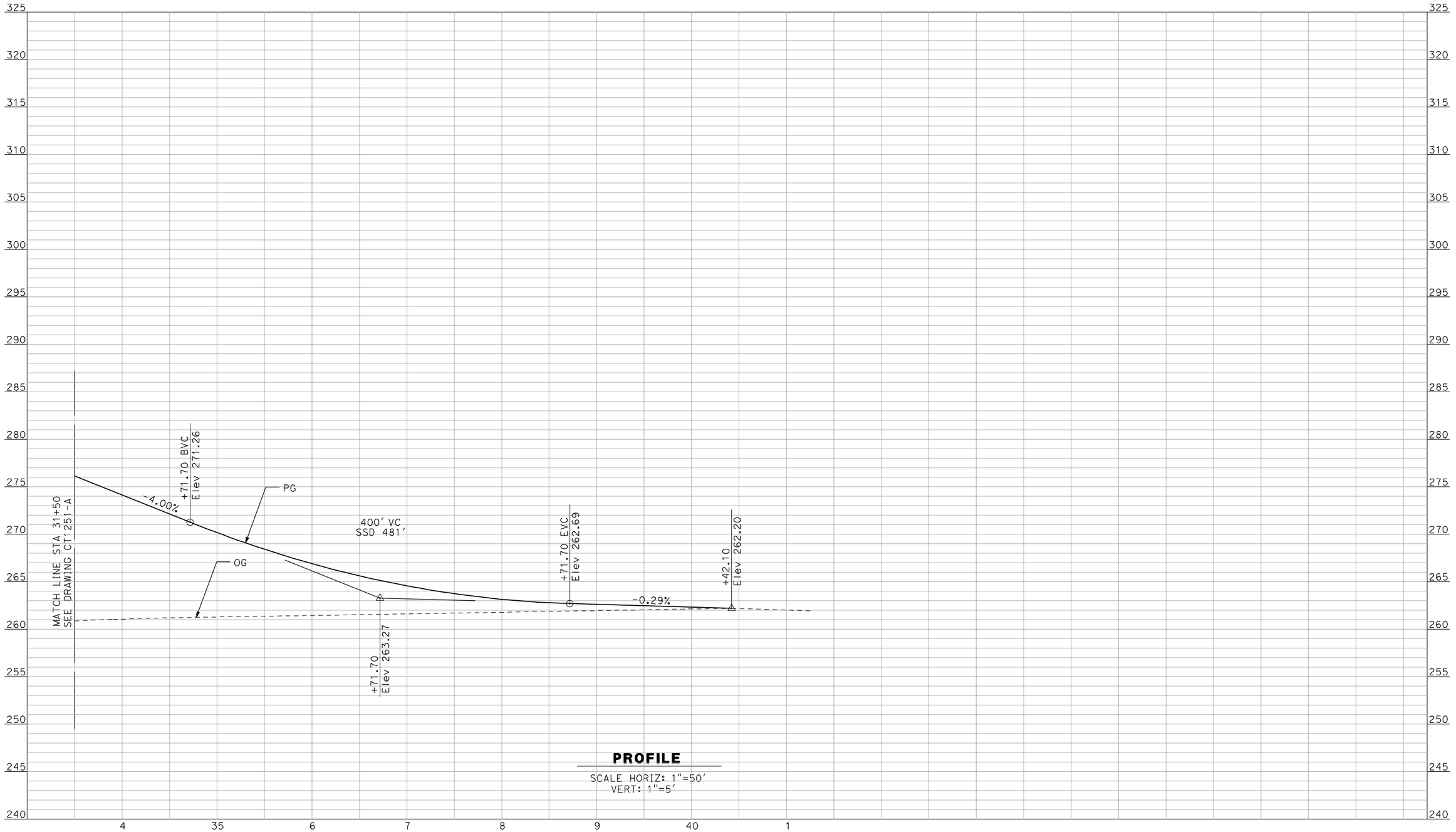
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1251-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

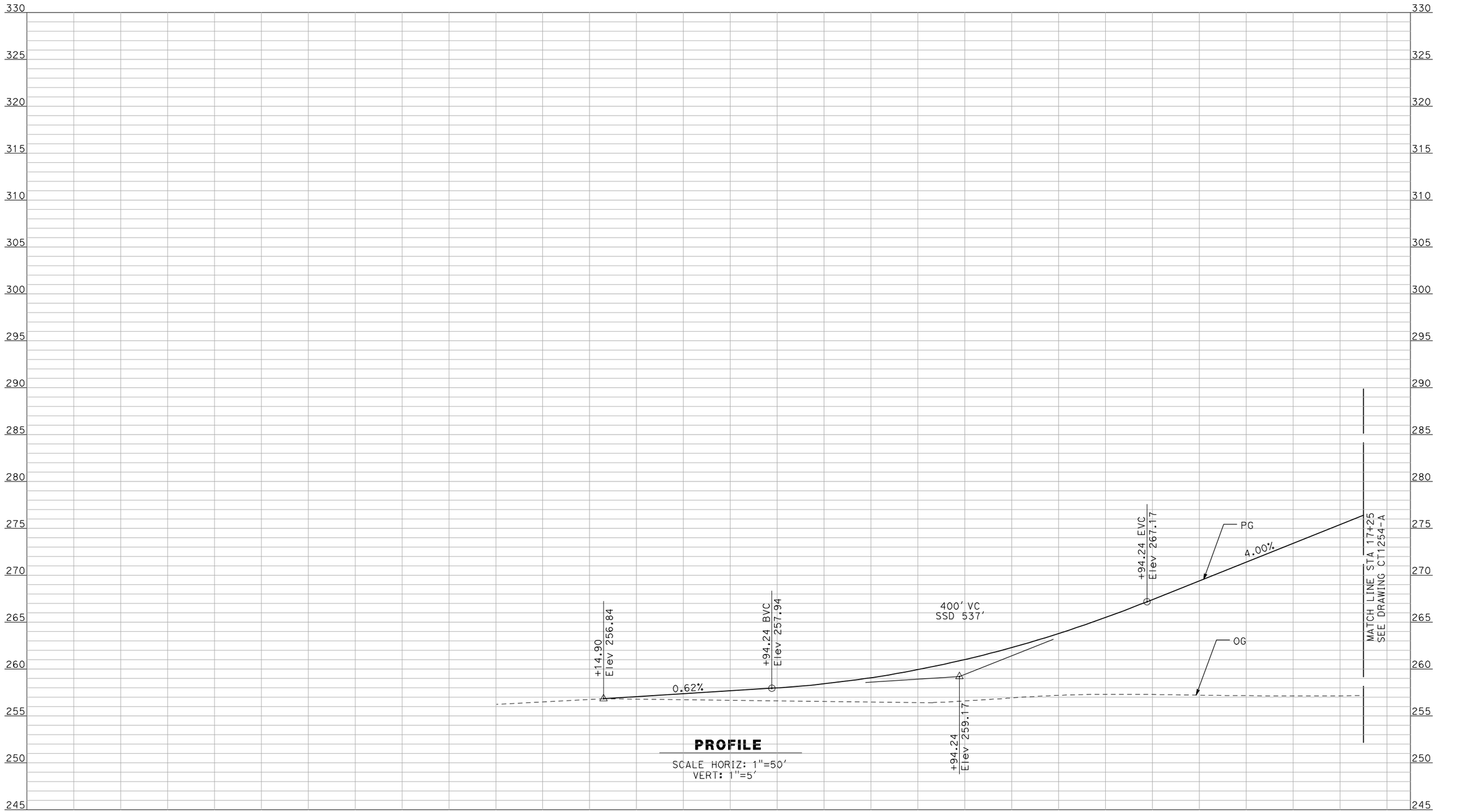
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - LE GRAND RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1252-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

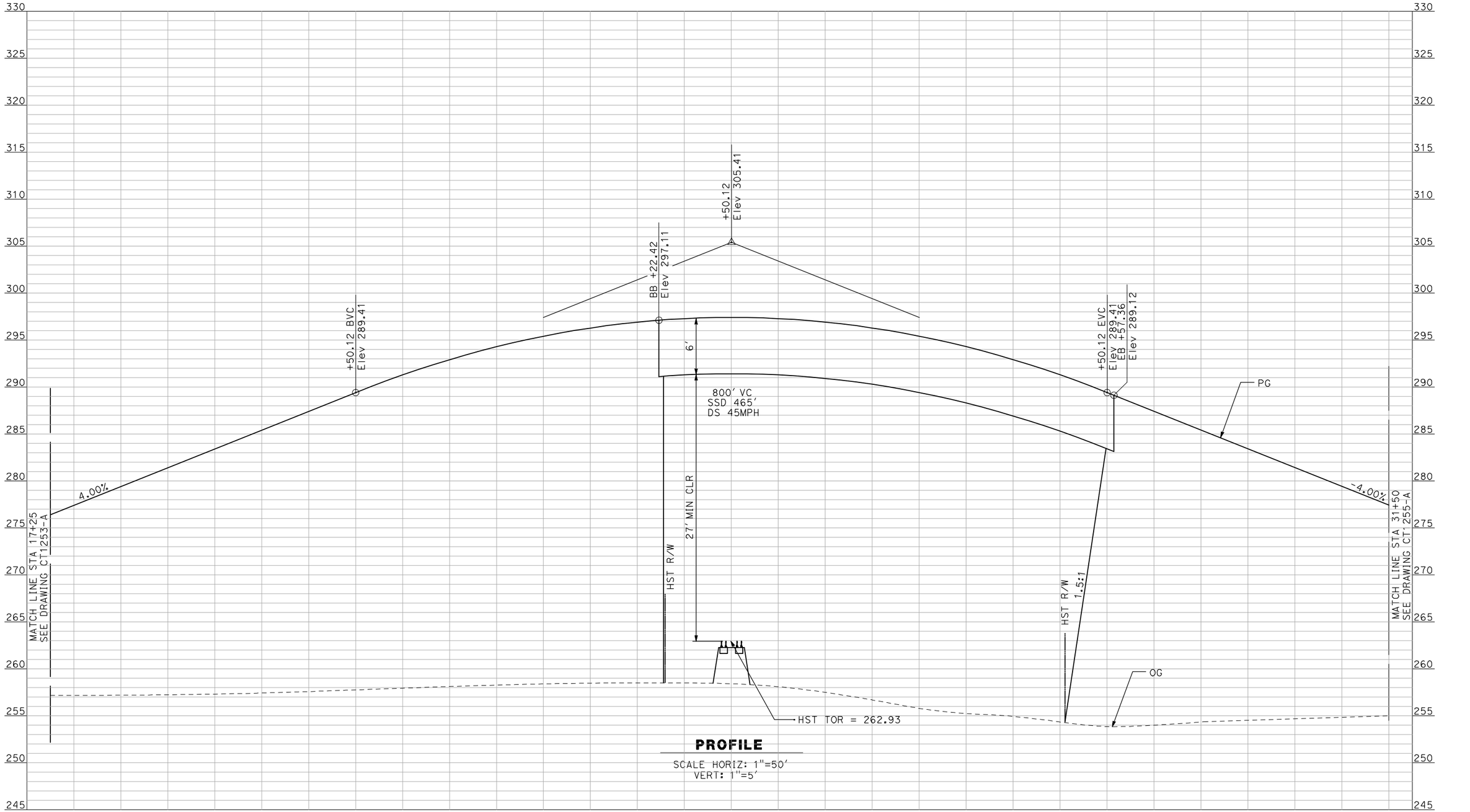
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1253-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

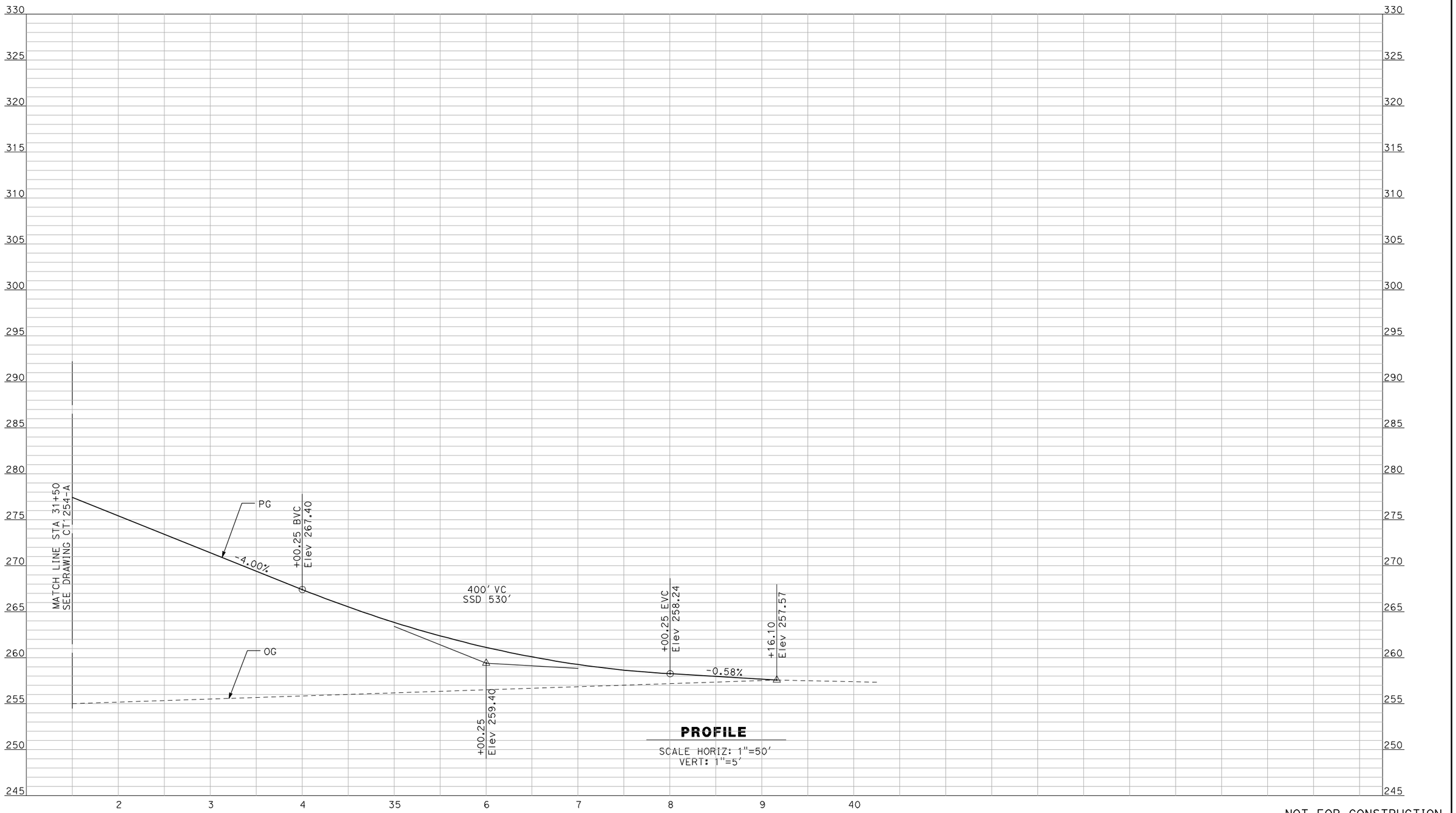
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1254-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

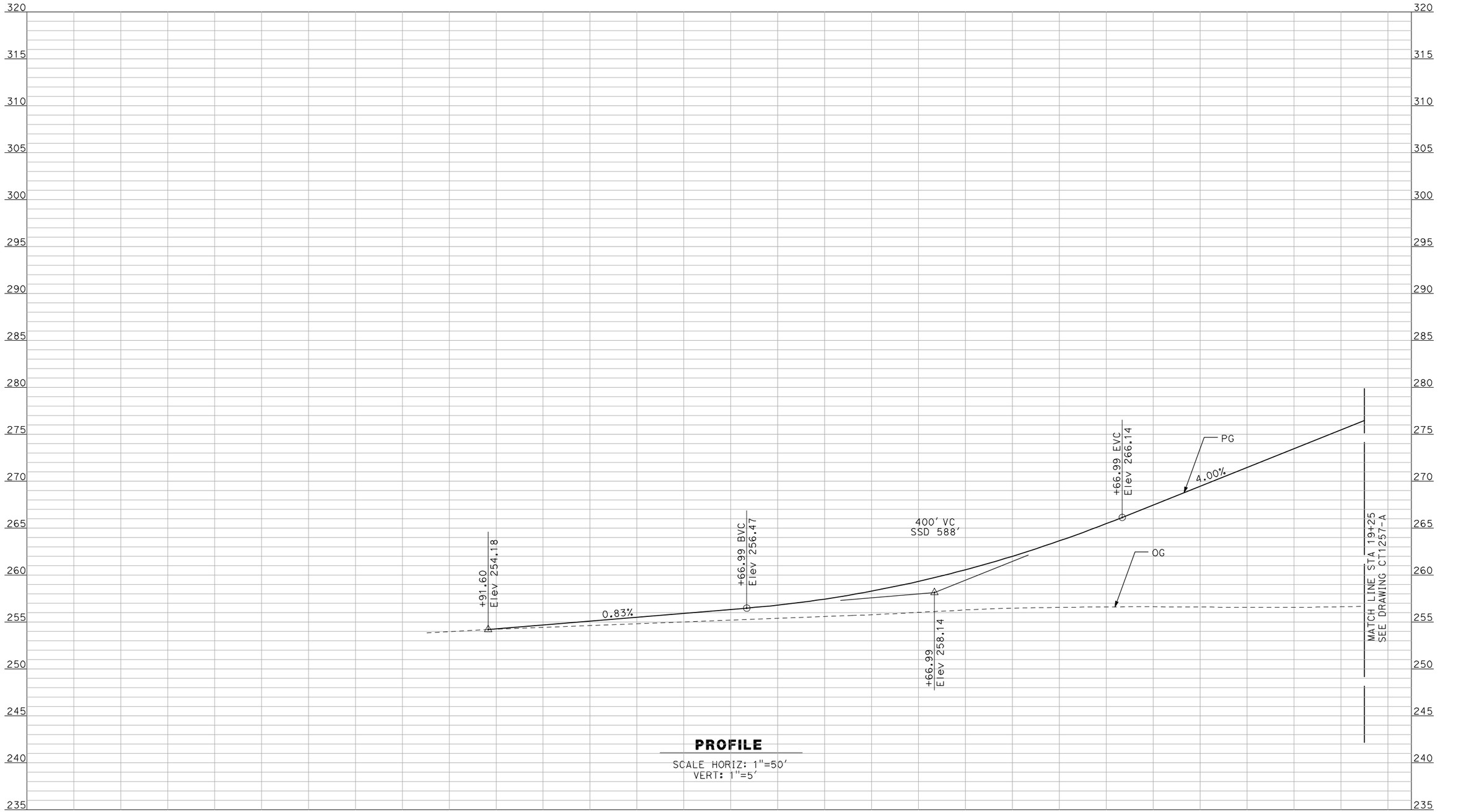
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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. FRESNO RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1255-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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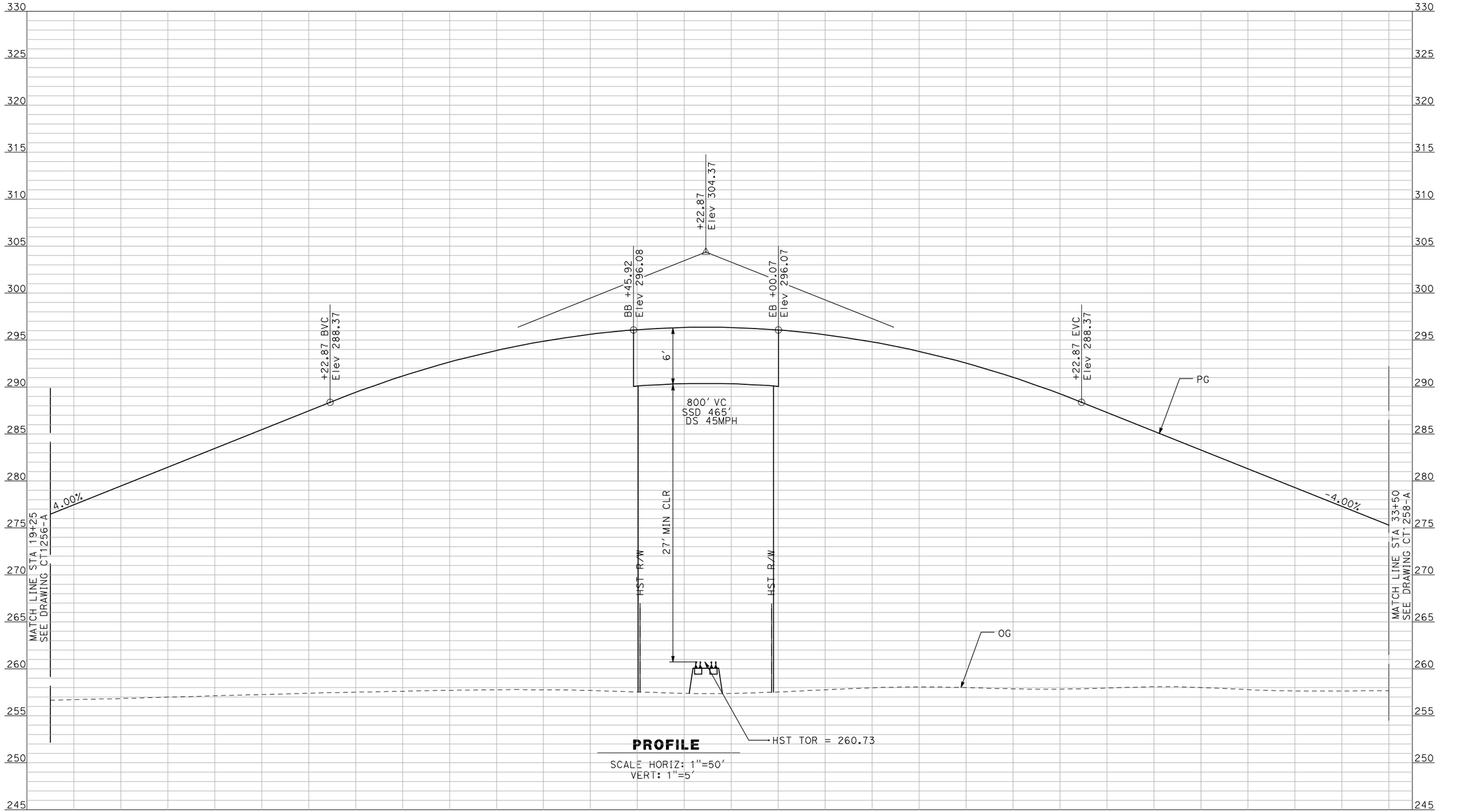
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. CUNNINGHAM RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1256-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

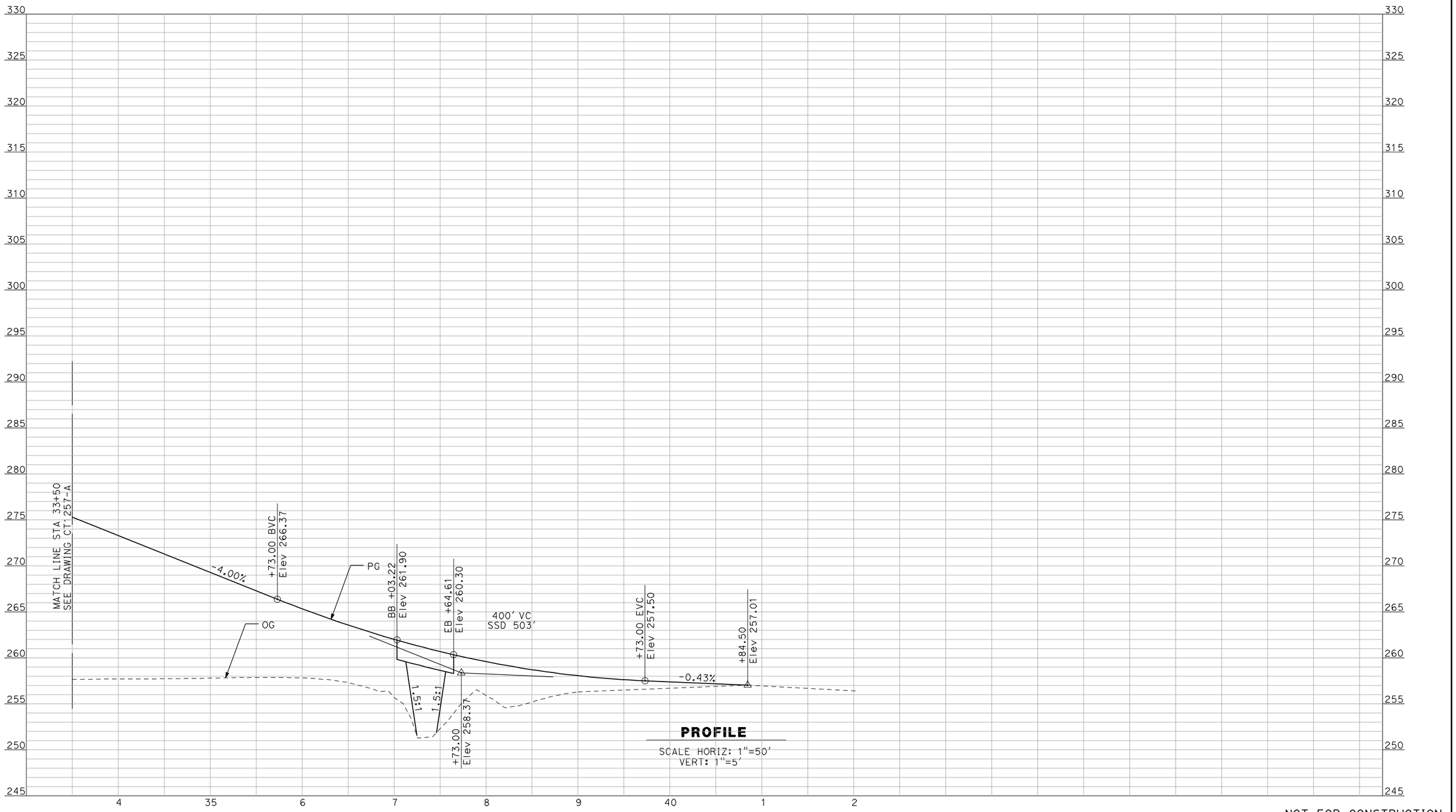
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. CUNNINGHAM RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1257-A
SCALE AS SHOWN
SHEET NO. ### OF ###




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DATE 04/29/2011

**RECORD SET**
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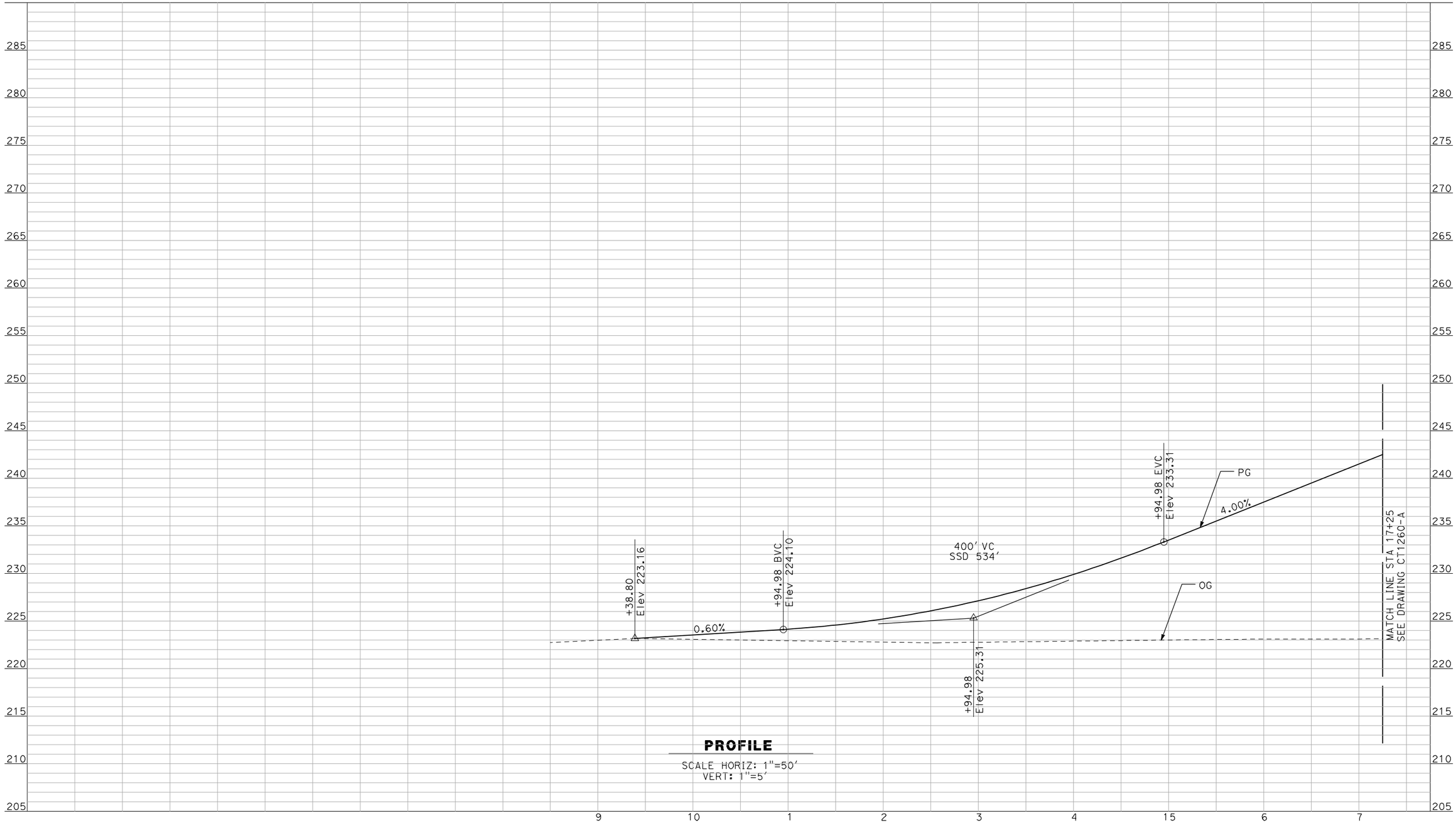
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. CUNNINGHAM RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1258-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

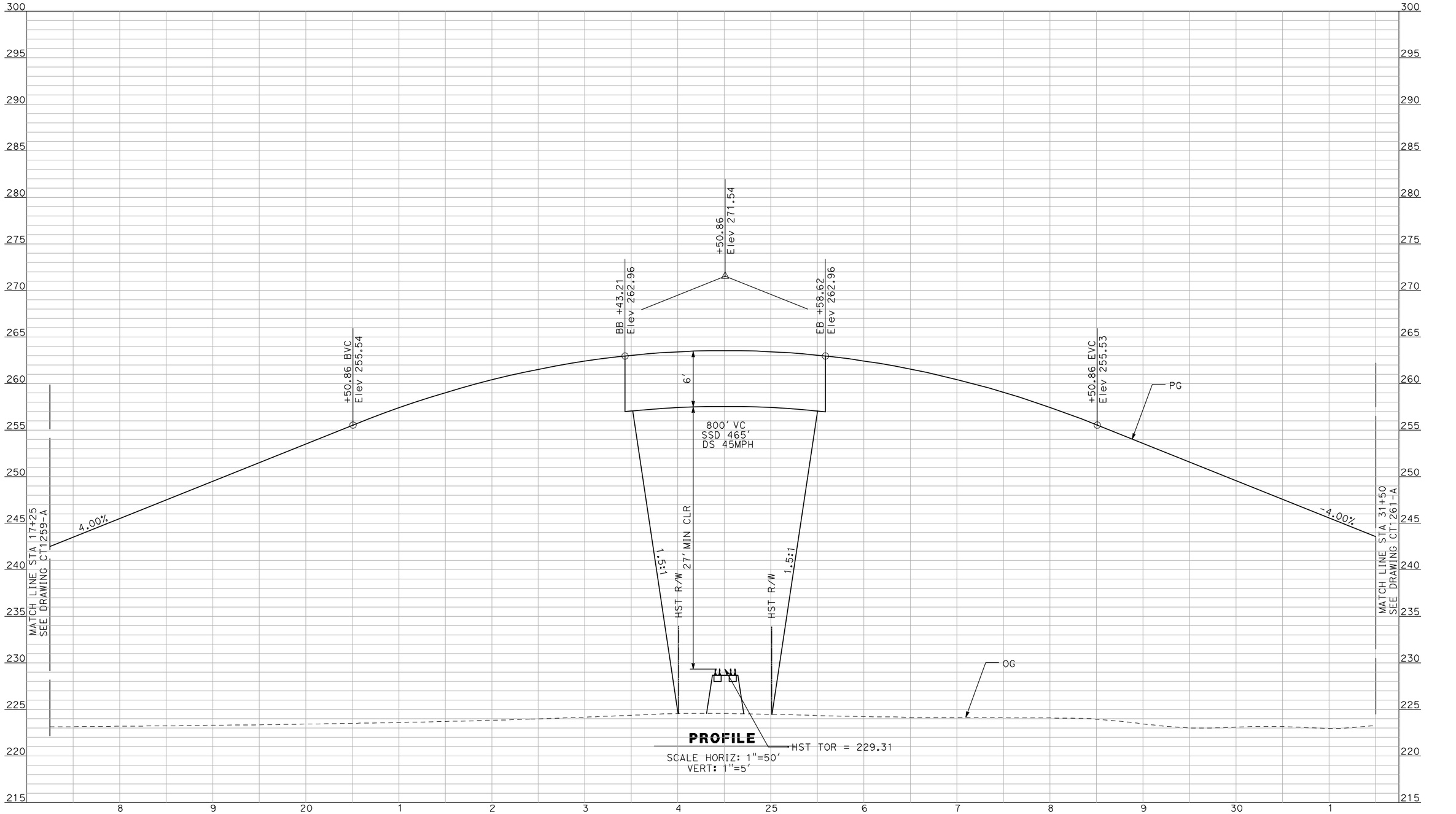
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1259-A
SCALE AS SHOWN
SHEET NO. ### OF ###

GibsonR1 4/29/2011 2:47:15 PM I:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\A1-Ave2124MC02\Volume 1A - Ave 2124 Wye Grade Separation\Profile\MF-CT-1259-A.dgn

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GibsonR1




**PROFILE**
SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

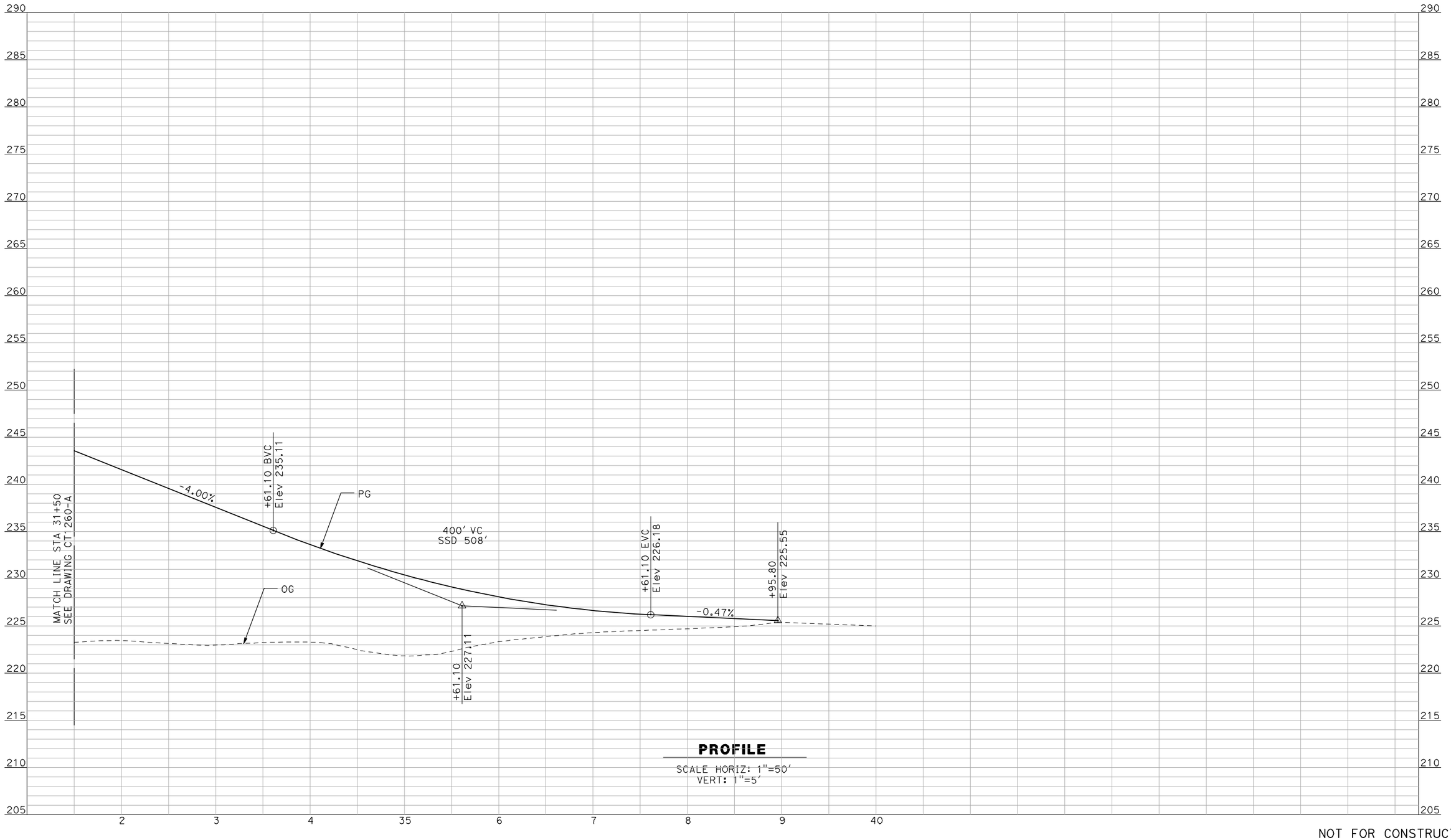
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1260-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

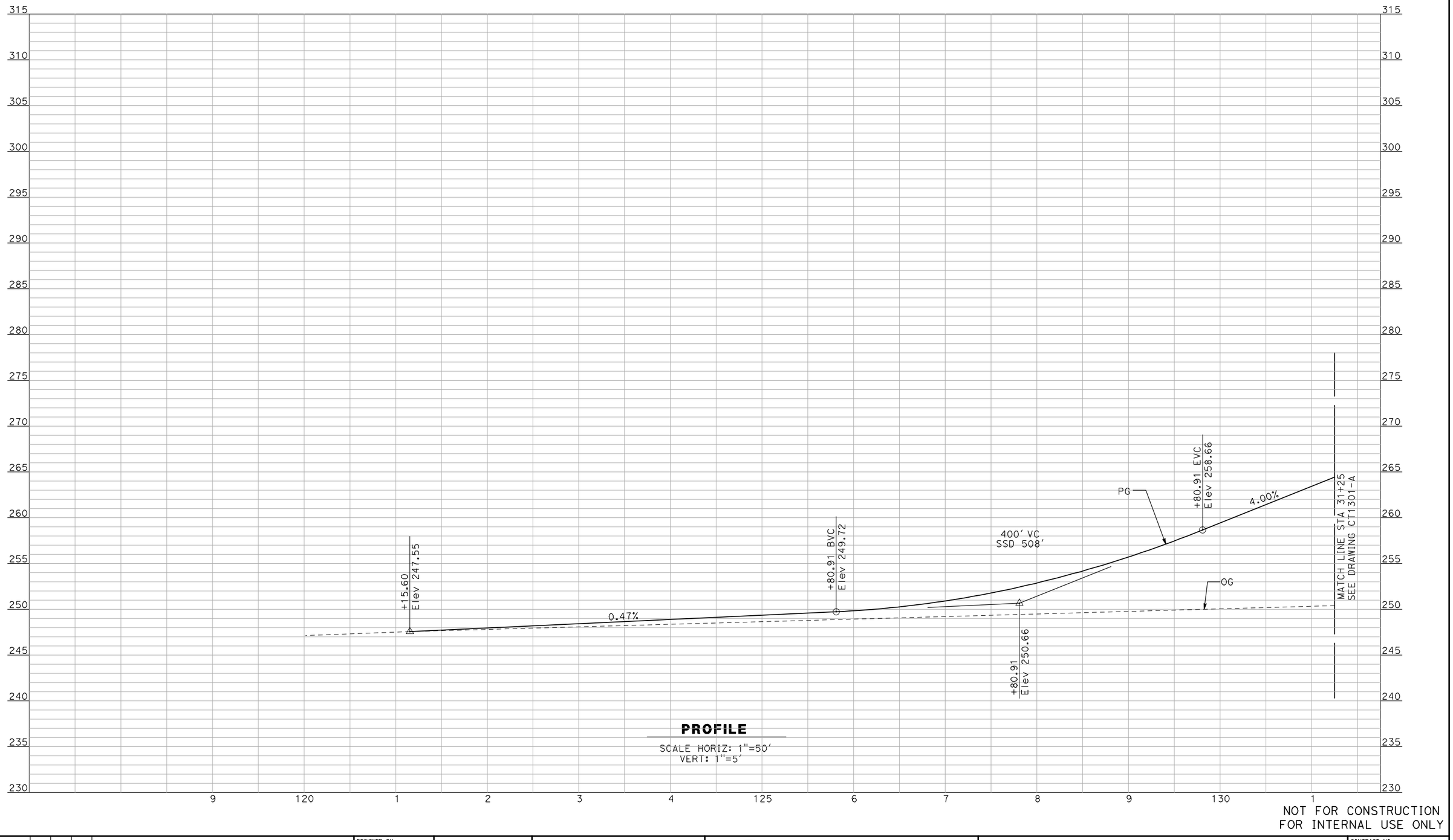
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1261-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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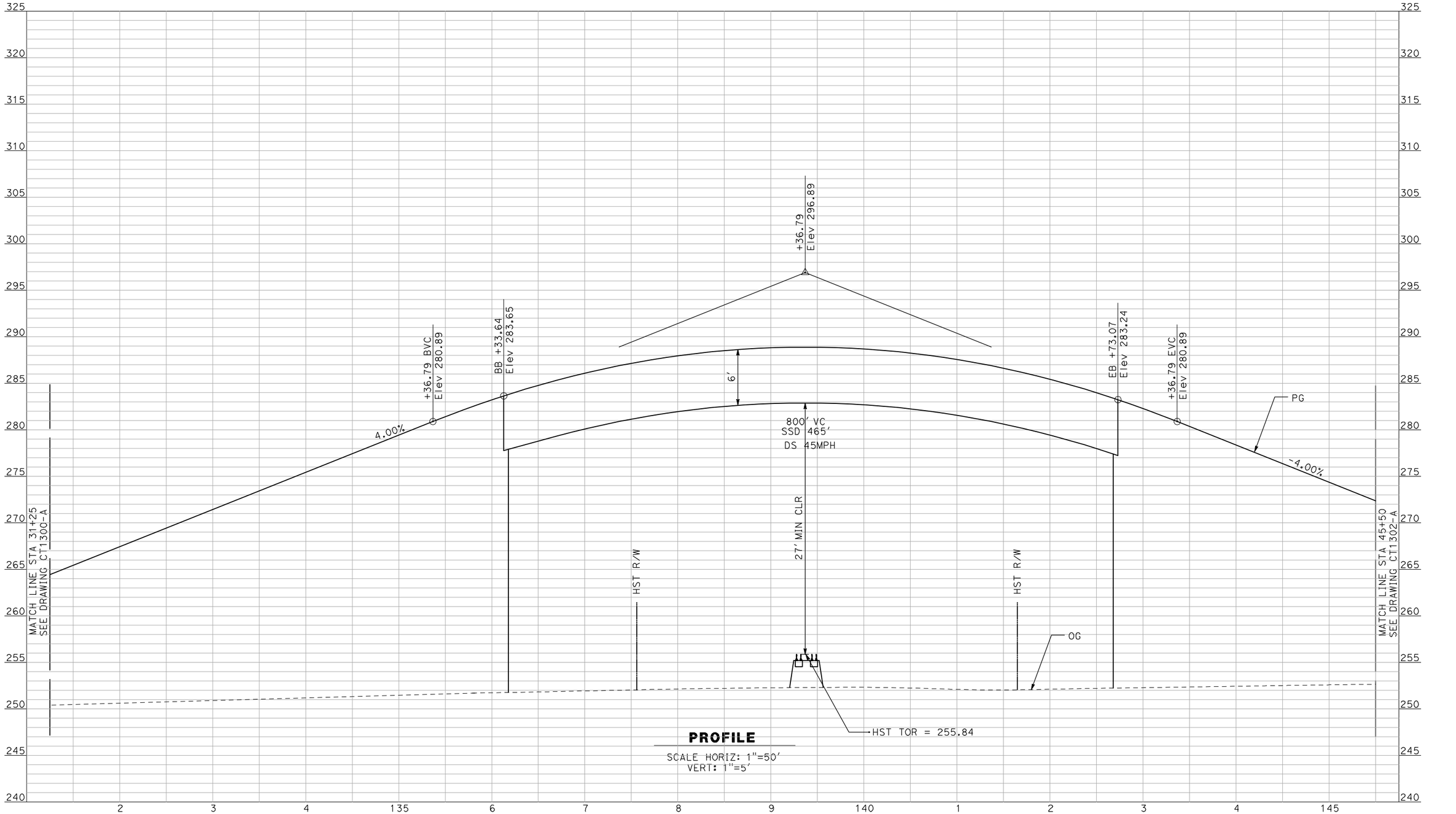
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE DR
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1300-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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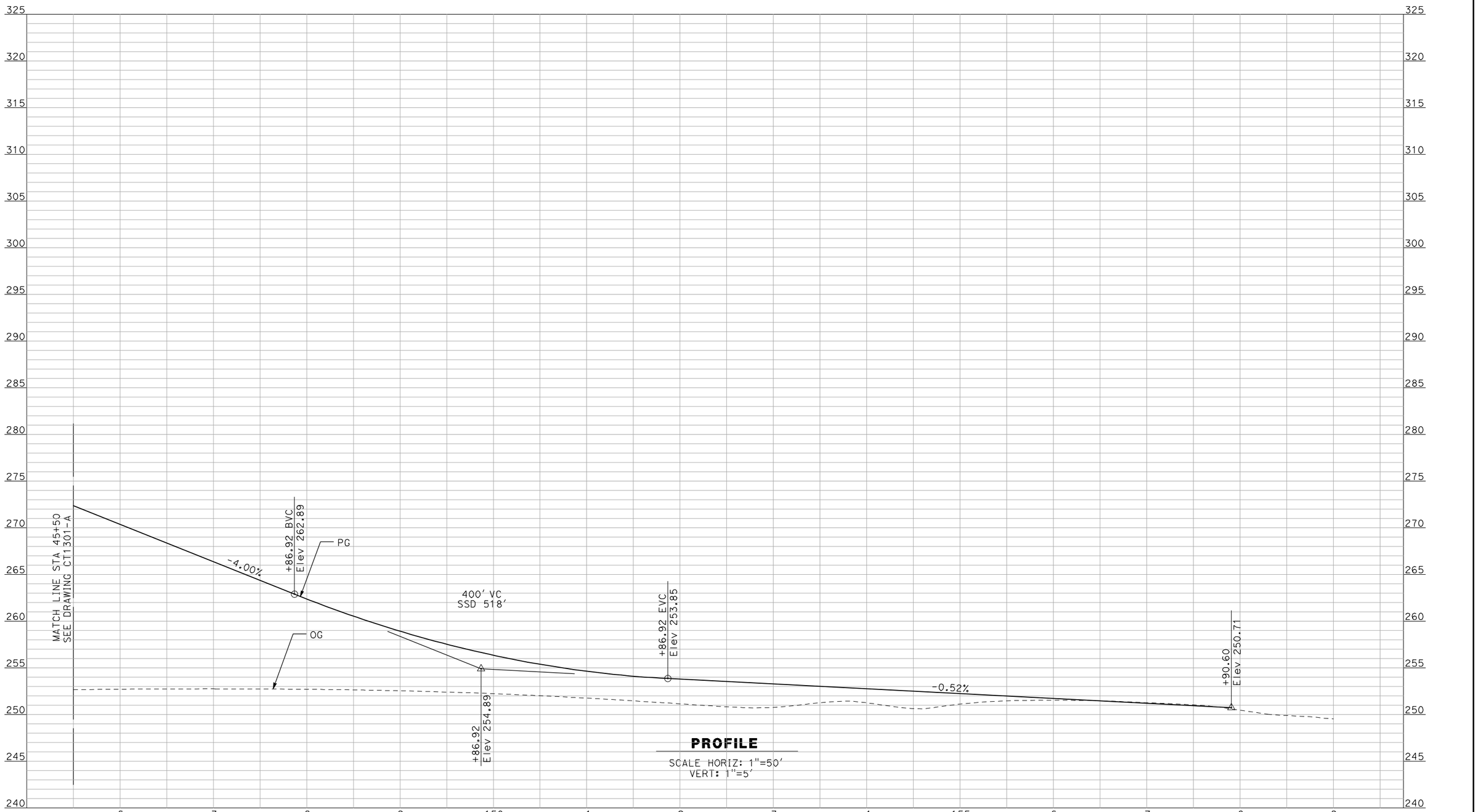
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE DR
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1301-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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FOR INTERNAL USE ONLY

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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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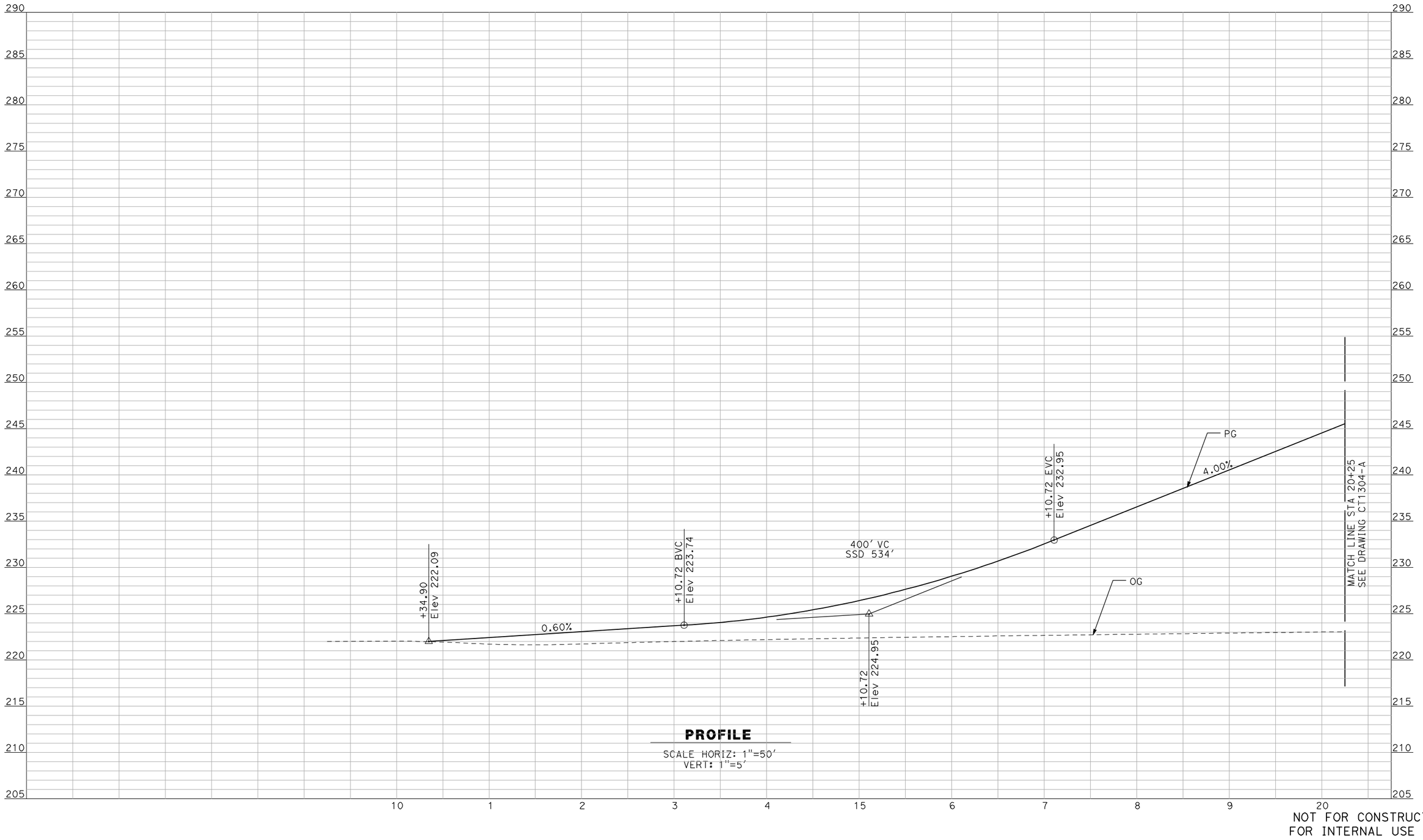
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. SANTA FE DR
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1302-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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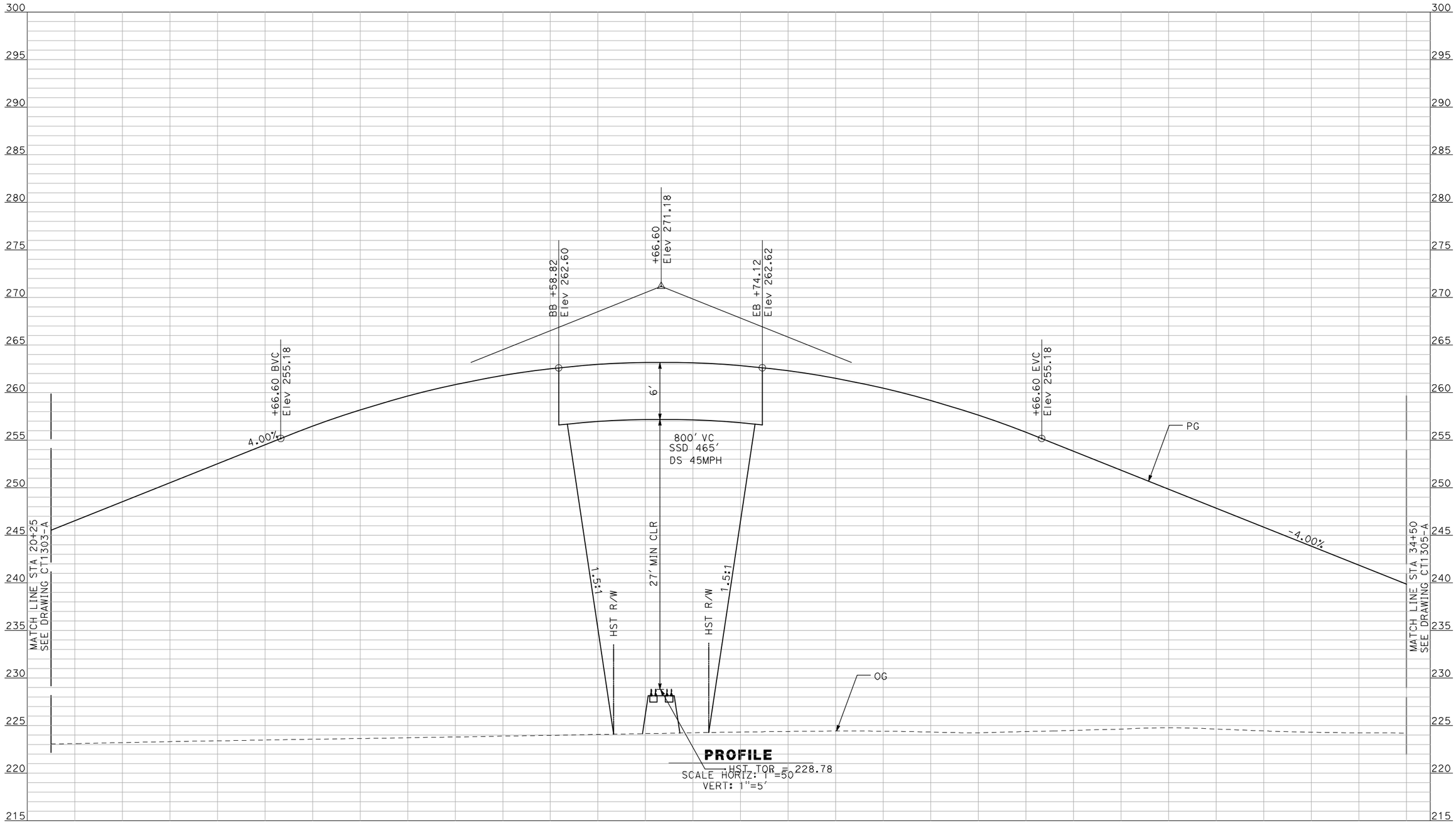
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1303-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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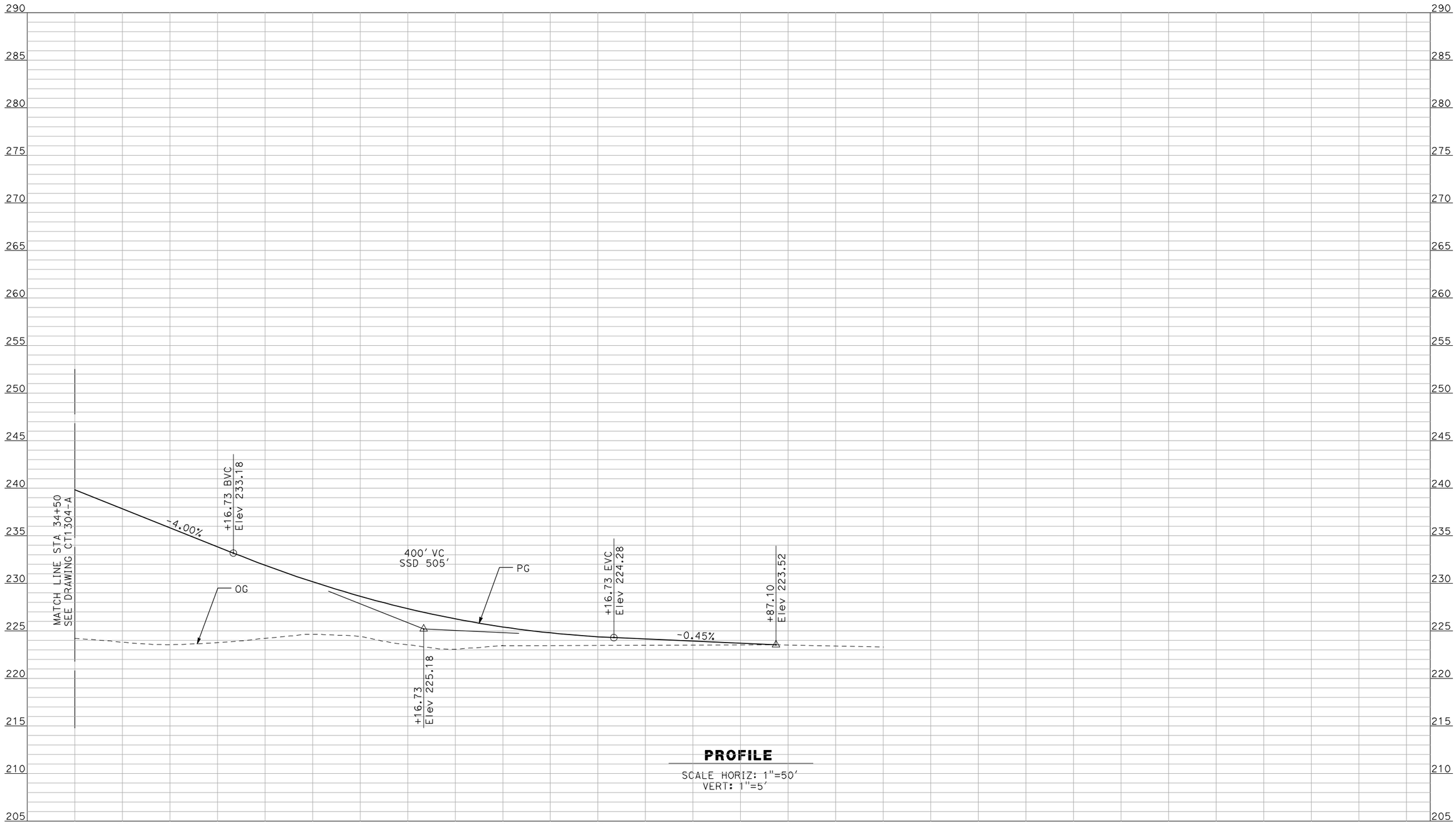
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1304-A
SCALE AS SHOWN
SHEET NO. ### OF ###




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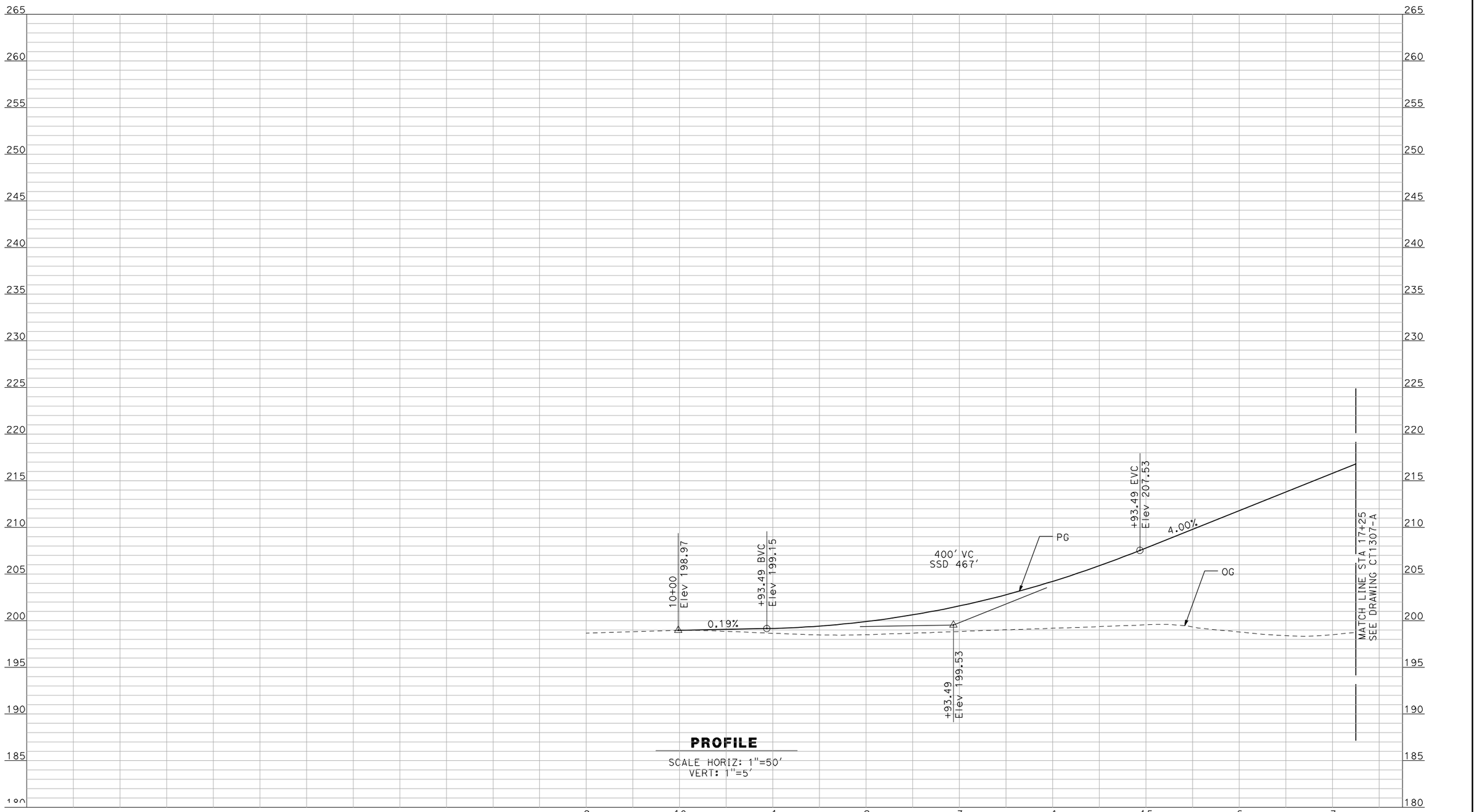
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - PLAINSBURG RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1305-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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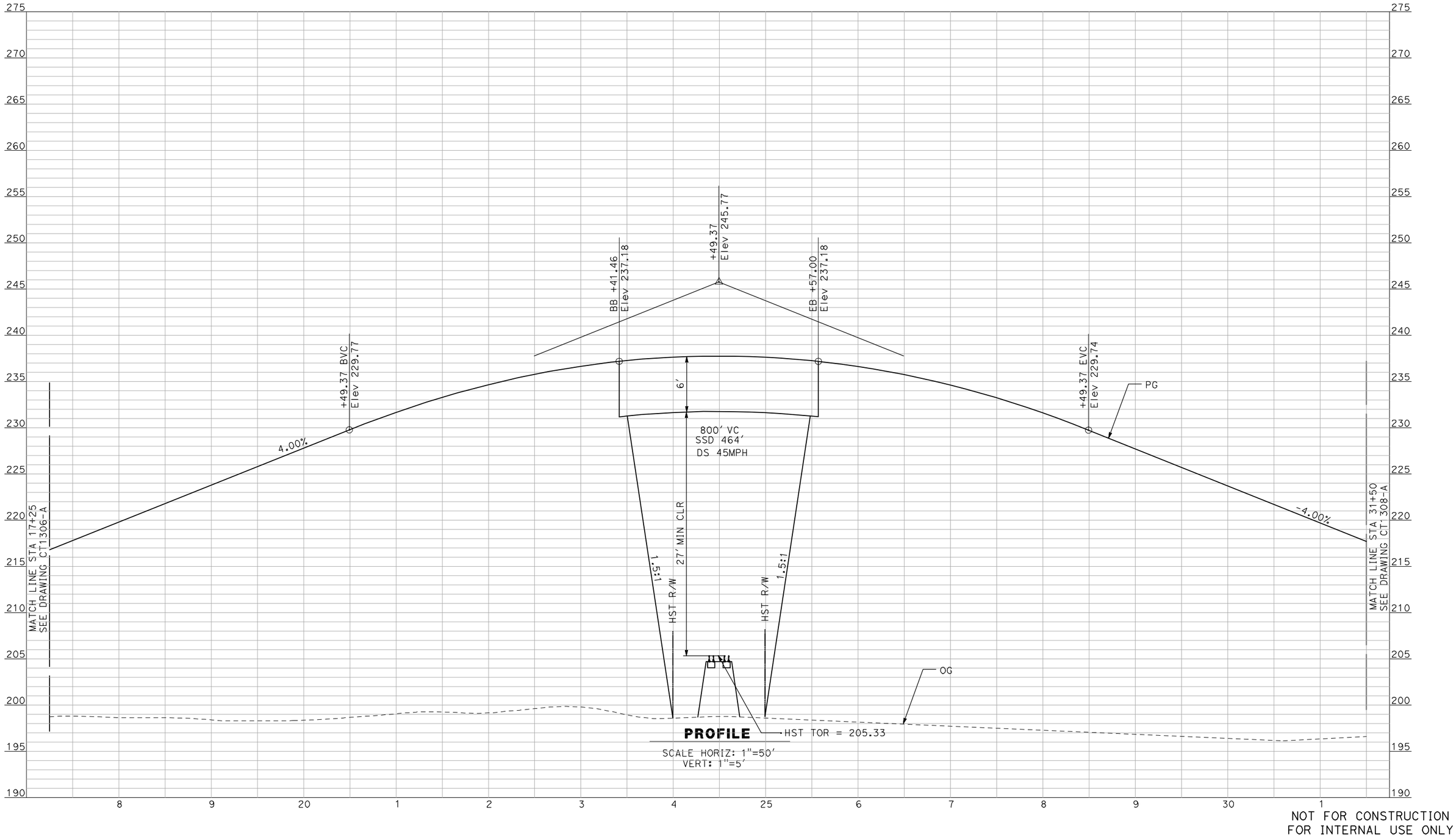
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ARBOLEDA RD
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1306-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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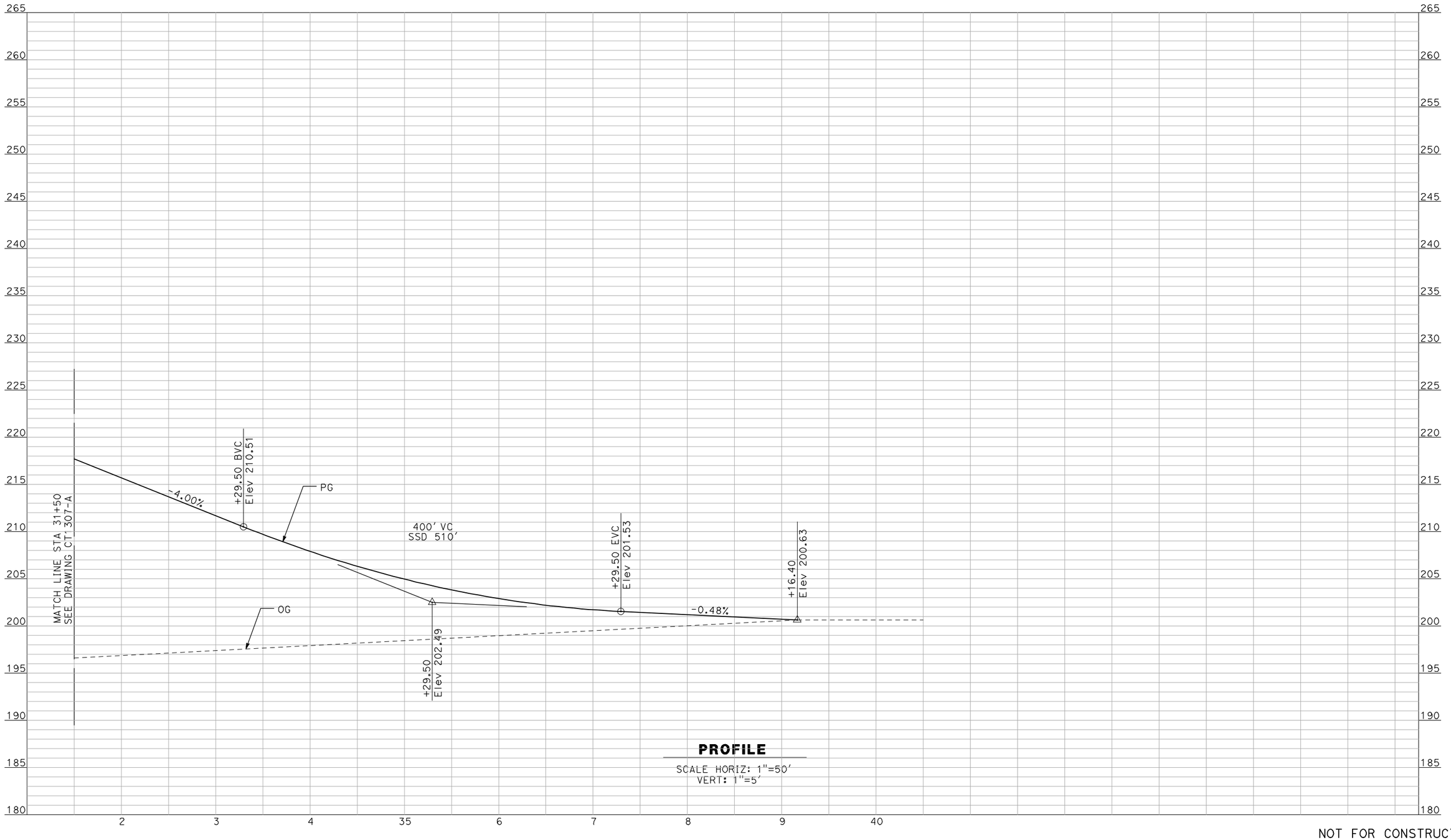
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ARBOLEDA RD
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1307-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PROFILE**

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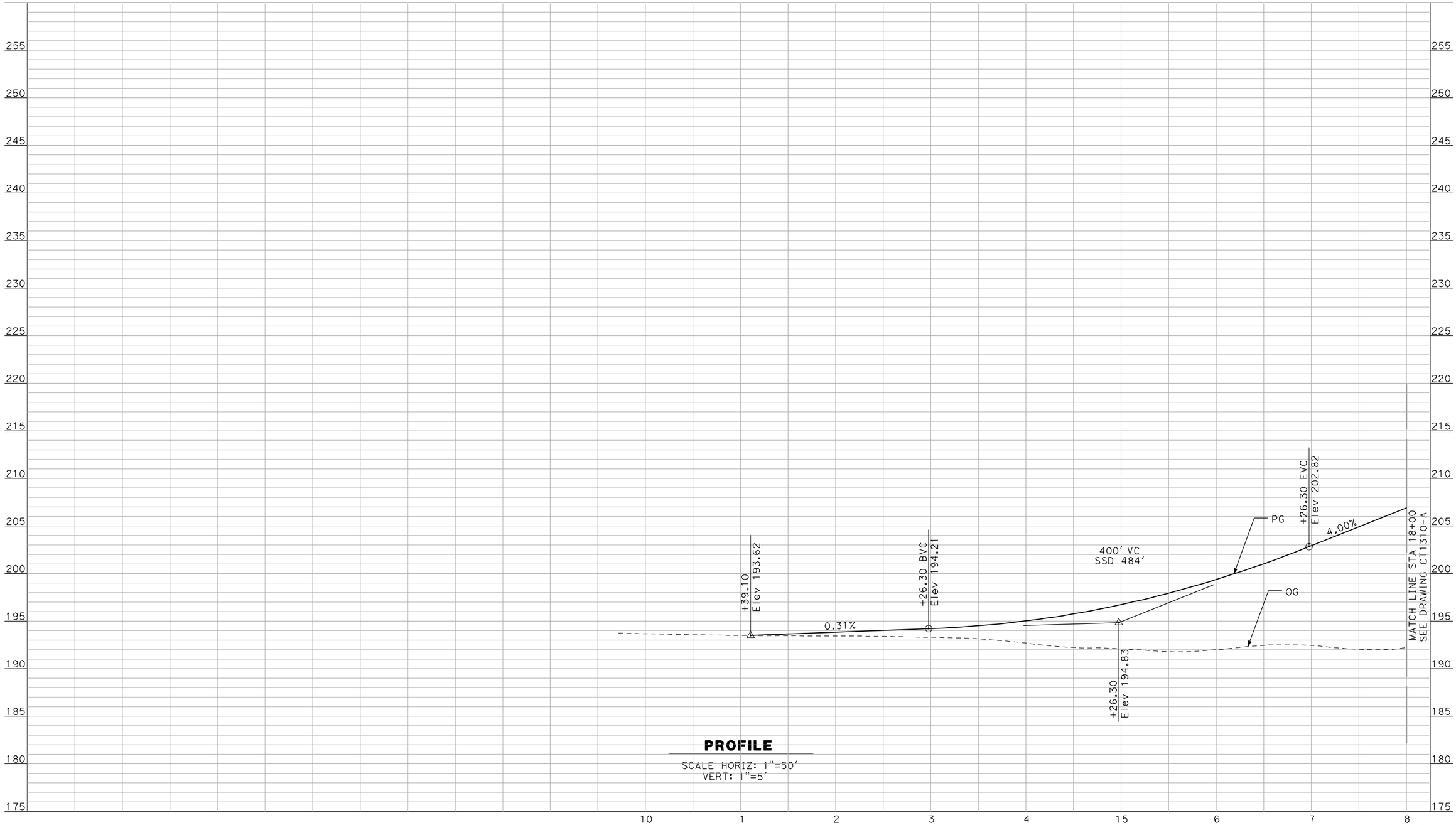
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ARBOLEDA RD
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1308-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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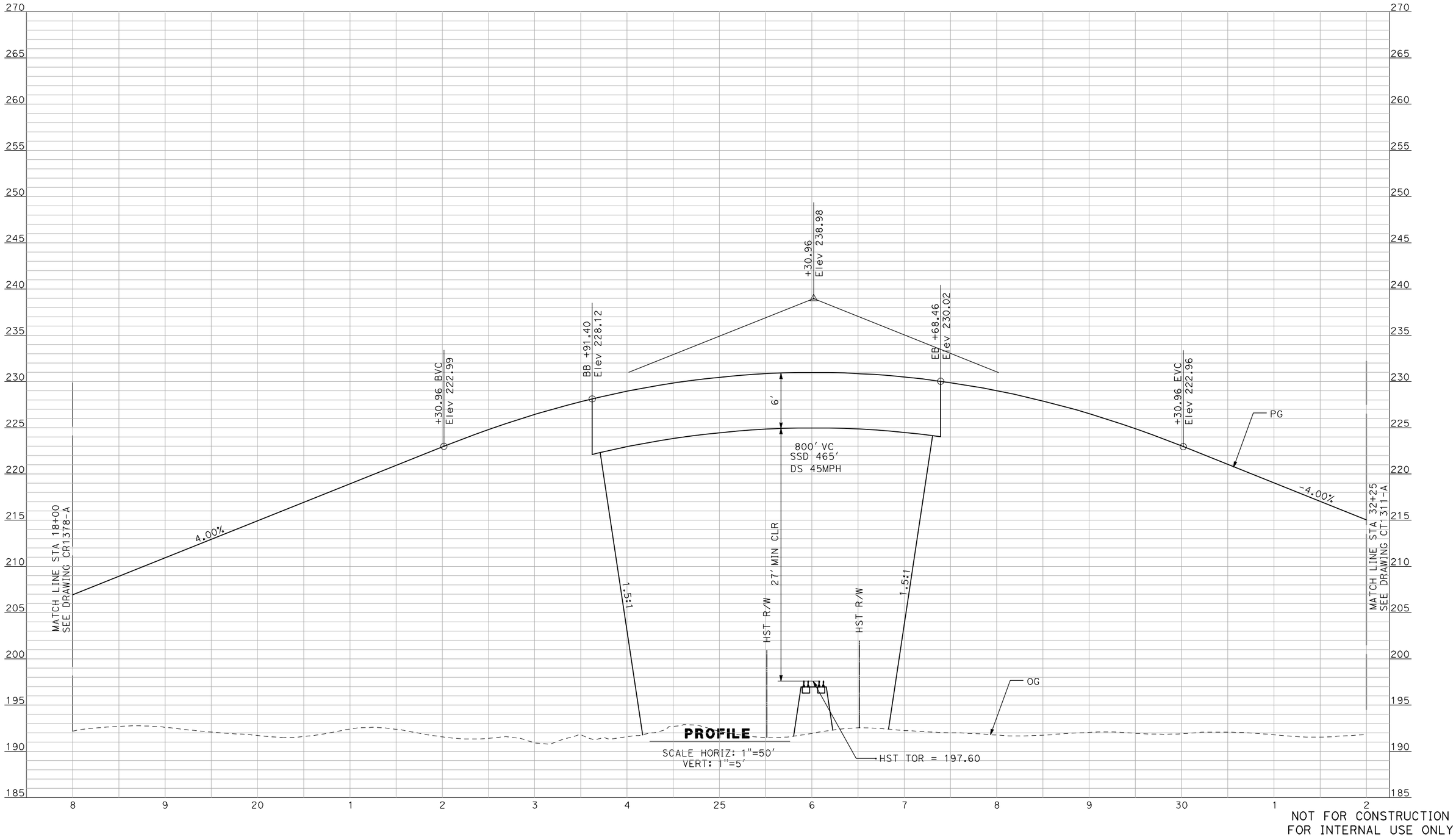
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ORCHARD DR
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1309-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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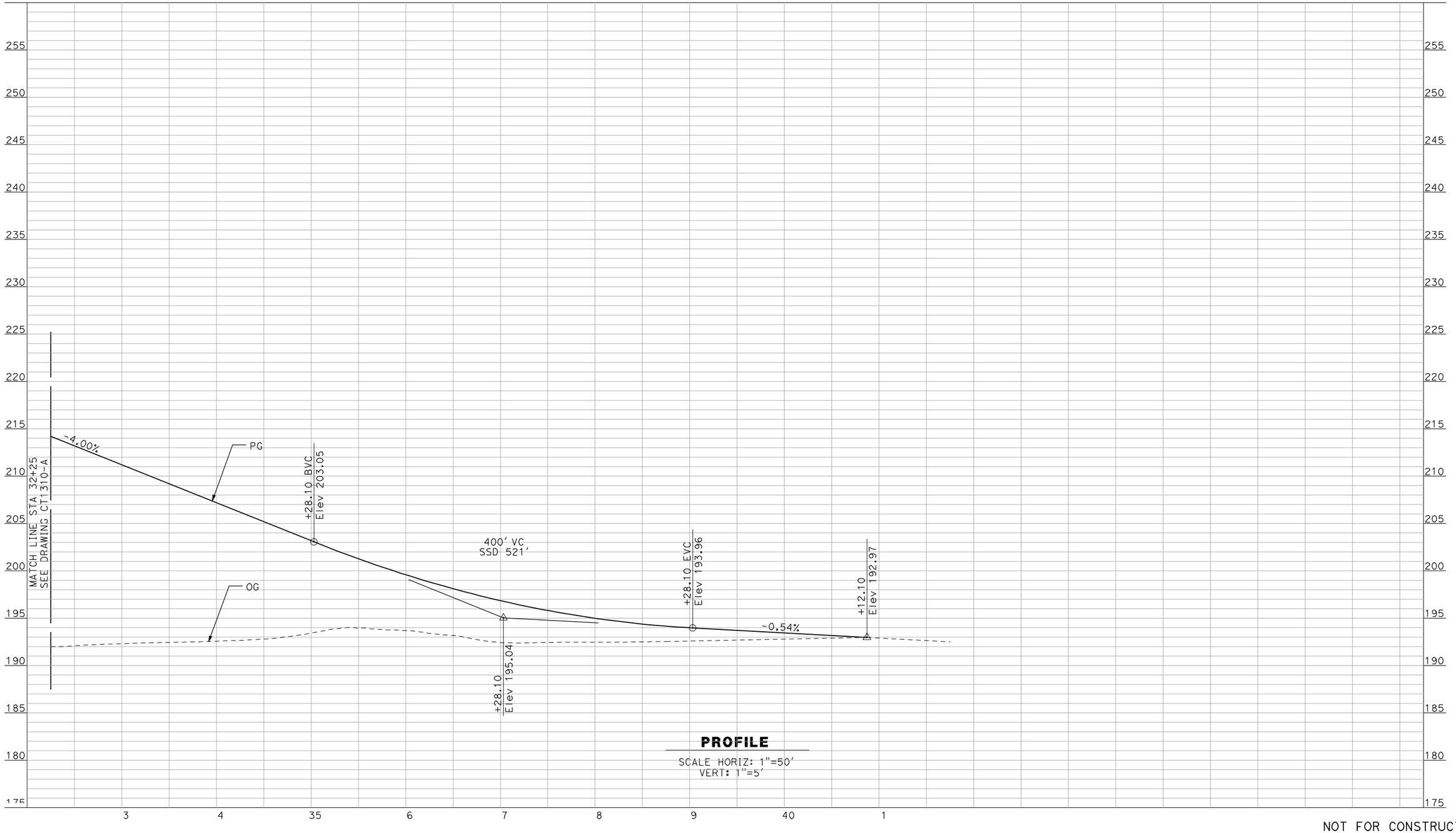
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ORCHARD DR
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1310-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
GRADE SEPARATION - S. ORCHARD DR
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT1311-A
SCALE AS SHOWN
SHEET NO. ### OF ###

| SHT NO. | DWG NO. | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | SHEET TITLE LINE 5 | SHEET TITLE LINE 6 |
|---|---|---|---|---|---|
| **ROADWAY BRIDGE STRUCTURE PLAN** | | | | | |
| **BNSF AVENUE 21** | | | | | |
| GENERAL | | | | | |
| | SB0101 | BNSF MAIN LINE | AVENUE 21 | INDEX OF DRAWINGS | SHEET 1 OF 1 |
| | SB0201 | BNSF MAIN LINE | AVENUE 21 | STRUCTURE INDEX MAP | SHEET 1 OF 2 |
| | SB0202 | BNSF MERCED CONNECTION | AVENUE 21 | STRUCTURE INDEX MAP | SHEET 2 OF 2 |
| OVERHEAD BRIDGES | | | | | |
| | ST1001 | BNSF MAIN LINE | AVENUE 21 | AVENUE 9 OVERHEAD | PLANNING STUDY |
| | ST1002 | BNSF MAIN LINE | AVENUE 21 | AVENUE 10 OVERHEAD | PLANNING STUDY |
| | ST1003 | BNSF MAIN LINE | AVENUE 21 | AVENUE 11 OVERHEAD | PLANNING STUDY |
| | ST1004 | BNSF MAIN LINE | AVENUE 21 | AVENUE 12 OVERHEAD | PLANNING STUDY |
| | ST1005 | BNSF MAIN LINE | AVENUE 21 | AVENUE 13 OVERHEAD | PLANNING STUDY-SHEET 1 OF 2 |
| | ST1005A | BNSF MAIN LINE | AVENUE 21 | AVENUE 13 OVERHEAD | PLANNING STUDY-SHEET 2 OF 2 |
| | ST1006 | BNSF MAIN LINE | AVENUE 21 | AVENUE 15 OVERHEAD | PLANNING STUDY |
| | ST1007 | BNSF MAIN LINE | AVENUE 21 | AVENUE 15½ OVERHEAD | PLANNING STUDY |
| | ST1009 | BNSF MAIN LINE | AVENUE 21 | AVENUE 17 OVERHEAD | PLANNING STUDY |
| | ST1012 | BNSF MAIN LINE | AVENUE 21 | AVENUE 21 OVERHEAD | PLANNING STUDY |
| | ST1013 | BNSF MAIN LINE | AVENUE 21 | ROAD 24 OVERHEAD | PLANNING STUDY |
| | ST1015 | BNSF MAIN LINE | AVENUE 21 | AVENUE 26 OVERHEAD | PLANNING STUDY |
| | ST1016 | BNSF MAIN LINE | AVENUE 21 | SANTA FE DRIVE OVERHEAD | PLANNING STUDY |
| | ST1017 | BNSF MERCED CONNECTION | AVENUE 21 | BUCHANAN HOLLOW RD OVERHEAD | PLANNING STUDY |
| | ST1018 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | BURCHELL AVENUE OVERHEAD | PLANNING STUDY |
| | ST1019 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | PLAINSBURG ROAD OVERHEAD | PLANNING STUDY |
| | ST1020 | BNSF MERCED CONNECTION | AVENUE 21 | ARBOLEDA DRIVE OVERHEAD | PLANNING STUDY |
| | ST1021 | BNSF WYE CONNECTION | AVENUE 21 | AVENUE 22 OVERHEAD | PLANNING STUDY |
| | ST1022 | BNSF MAIN LINE | AVENUE 21 | AVENUE 20 OVERHEAD | PLANNING STUDY |
| | ST1023 | BNSF MAIN LINE | AVENUE 21 | AVENUE 20½ OVERHEAD | PLANNING STUDY |
| | ST1026 | BNSF MAIN LINE | AVENUE 21 | ROAD 20 OVERHEAD | PLANNING STUDY |
| | ST1027 | BNSF MAIN LINE | AVENUE 21 | ROAD 18½ OVERHEAD | PLANNING STUDY |
| | ST1028 | BNSF MAIN LINE | AVENUE 21 | ROAD 16 OVERHEAD | PLANNING STUDY |
| | ST1070 | BNSF MAIN LINE | AVENUE 21 | AVENUE 7 OVERHEAD | PLANNING STUDY |
| | ST1180 | UPRR/SR 99 MERCED CONNECTION | AVENUE 21 | G STREET OVERHEAD | PLANNING STUDY |
| **DESIGN OPTION ALTERNATIVE 1** | | | | | |
| | ST1050 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | WHITE ROCK ROAD OVERHEAD | PLANNING STUDY |
| | ST1051 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | LE GRAND ROAD OVERHEAD | PLANNING STUDY |
| | ST1052 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | FRESNO ROAD OVERHEAD | PLANNING STUDY |
| | ST1053 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | CUNNINGHAM ROAD OVERHEAD | PLANNING STUDY |
| | ST1054 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | BURCHELL AVENUE OVERHEAD | PLANNING STUDY |
| **DESIGN OPTION ALTERNATIVE 2** | | | | | |
| | ST1055 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | LE GRAND ROAD OVERHEAD | PLANNING STUDY |
| | ST1056 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | FRESNO ROAD OVERHEAD | PLANNING STUDY |
| | ST1057 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | CUNNINGHAM ROAD OVERHEAD | PLANNING STUDY |
| | ST1058 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | PLAINSBURG ROAD OVERHEAD | PLANNING STUDY |
| **DESIGN OPTION ALTERNATIVE 3** | | | | | |
| | ST1059 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | SANTA FE AVENUE OVERHEAD | PLANNING STUDY |
| | ST1060 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | PLAINSBURG ROAD OVERHEAD | PLANNING STUDY |
| | ST1061 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | SOUTH ARBOLEDA DRIVE OVERHEAD | PLANNING STUDY |
| | ST1062 | BNSF MERCED CONNECTION | AVENUE 21/AVENUE 24 | SOUTH ORCHARD DRIVE OVERHEAD | PLANNING STUDY |

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| 2 | 02/24/12 | HL | EC | AB | |
| 1 | 12/28/11 | HL | EC | AB | |

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DRAWN BY E.CISNEROS
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IN CHARGE A. Boone
DATE 04/29/2011

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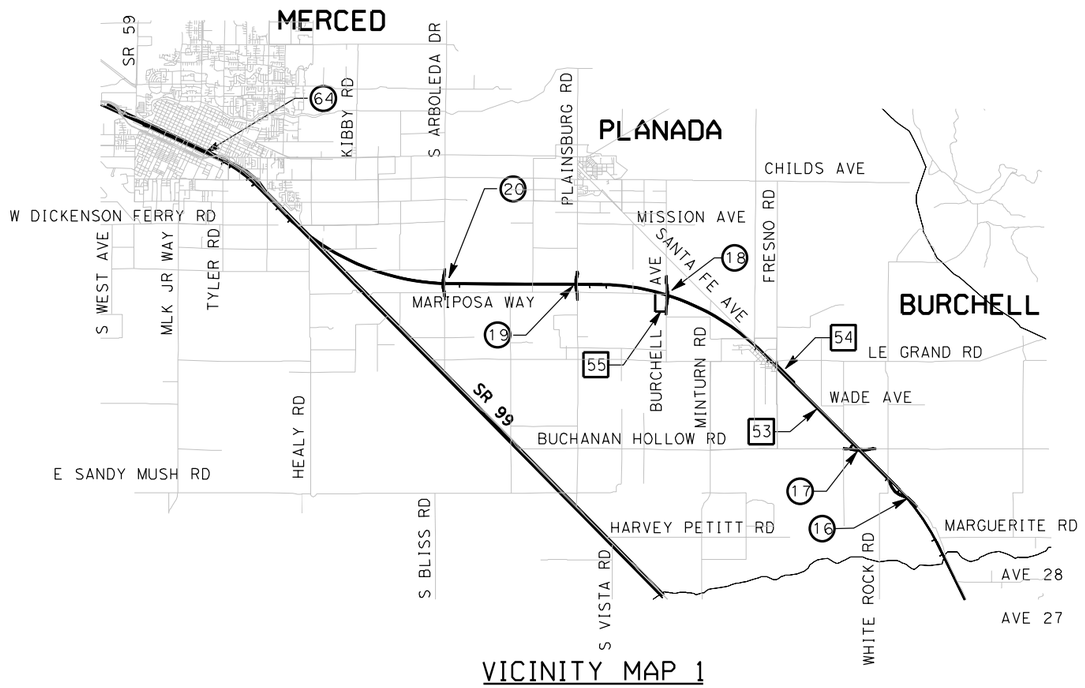
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
INDEX OF DRAWINGS
SHEET 1 OF 1

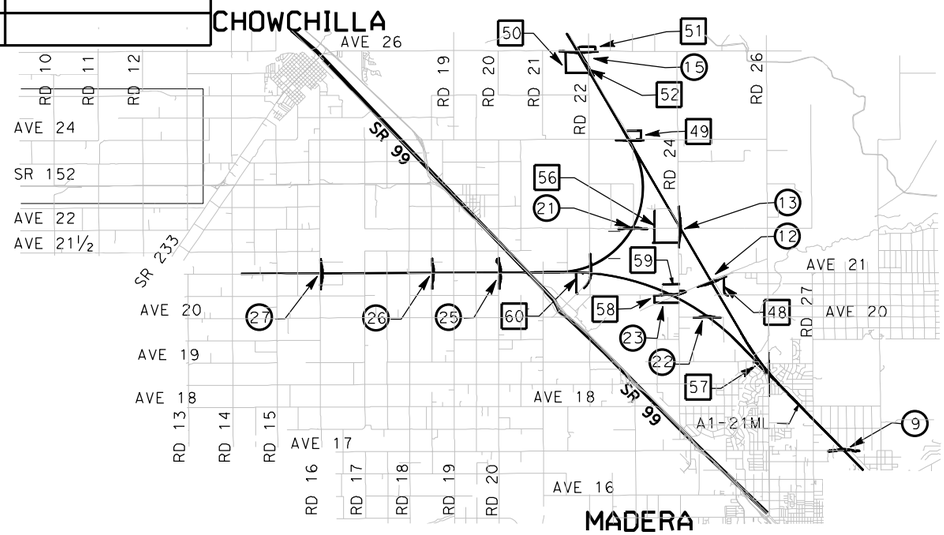
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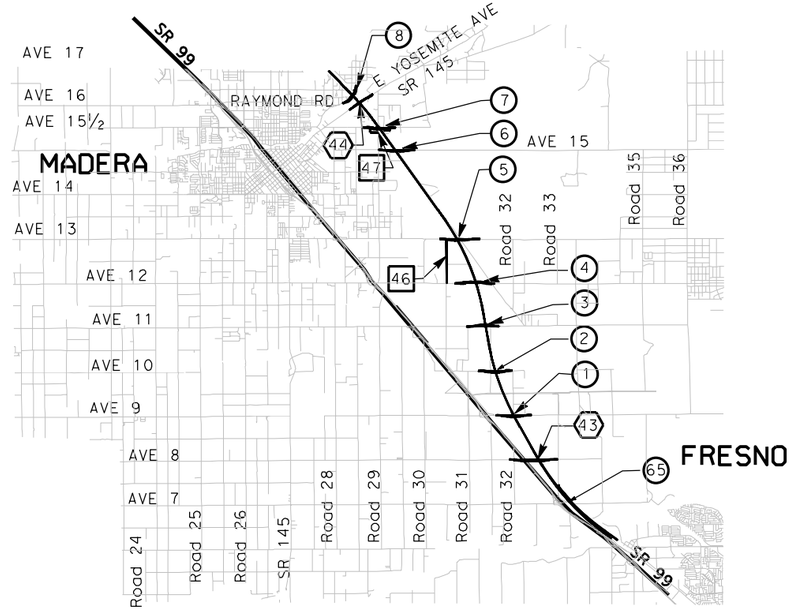
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| (1) | AVENUE 9 OVERHEAD | ST1001 | CT0001-A - CT0003-A |
| (2) | AVENUE 10 OVERHEAD | ST1002 | CT0004-A - CT0006-A |
| (3) | AVENUE 11 OVERHEAD | ST1003 | CT0007-A - CT0009-A |
| (4) | AVENUE 12 OVERHEAD | ST1004 | CT0010-A - CT0012-A |
| (5) | AVENUE 13 OVERHEAD | ST1005 & ST1005A | CT0013-A - CT0016-A |
| (6) | AVENUE 15 OVERHEAD | ST1006 | CT0017-A - CT0019-A |
| (7) | AVENUE 15 1/2 OVERHEAD | ST1007 | CT0020-A - CT0022-A |
| (8) | RAYMOND ROAD OVERHEAD | ST1008 | CT0023-A - CT0025-A |
| (9) | AVENUE 17 OVERHEAD | ST1009 | CT0026-A - CT0028-A |
| (12) | AVENUE 21 OVERHEAD | ST1012 | CT0035-A - CT0037-A |
| (13) | ROAD 24 OVERHEAD | ST1013 | CT0038-A - CT0040-A |
| (15) | AVENUE 26 OVERHEAD | ST1015 | CT0044-A - CT0047-A |
| (16) | SANTA FE DRIVE OVERHEAD | ST1016 | CT0048-A - CT0050-A |
| (17) | BUCHANAN HOLLOW ROAD OVERHEAD | ST1017 | CT0051-A - CT0053-A |
| (18) | BURCHELL AVENUE OVERHEAD | ST1018 | CT0054-A - CT0056-A |
| (19) | PLAINSBURG ROAD OVERHEAD | ST1019 | CT0057-A - CT0059-A |
| (20) | ARBOLEDA DRIVE OVERHEAD | ST1020 | CT0060-A - CT0062-A |
| (21) | AVENUE 22 OVERHEAD | ST1021 | CT0063-A - CT0065-A |
| (22) | AVENUE 20 OVERHEAD | ST1022 | CT0066-A - CT0068-A |
| (23) | AVENUE 20 1/2 OVERHEAD | ST1023 | CT0069-A - CT0071-A |
| (25) | ROAD 20 OVERHEAD | ST1026 | CT0076-A - CT0078-A |
| (26) | ROAD 18 1/2 OVERHEAD | ST1027 | CT0079-A - CT0081-A |
| (27) | ROAD 16 OVERHEAD | ST1028 | CT0082-A - CT0084-A |
| (65) | AVENUE 7 OVERHEAD | ST1070 | |
| (64) | G STREET OVERHEAD | ST1180 | |




VICINITY MAP 1




VICINITY MAP 2




VICINITY MAP 3

9000 0 9000 18000
GRAPHIC SCALE

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

⟨X⟩ - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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| 2 | 02/24/12 | HL | EC | AB | |
| 1 | 12/28/11 | HL | EC | AB | |

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DRAWN BY E. CISNEROS
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 01/13/2012

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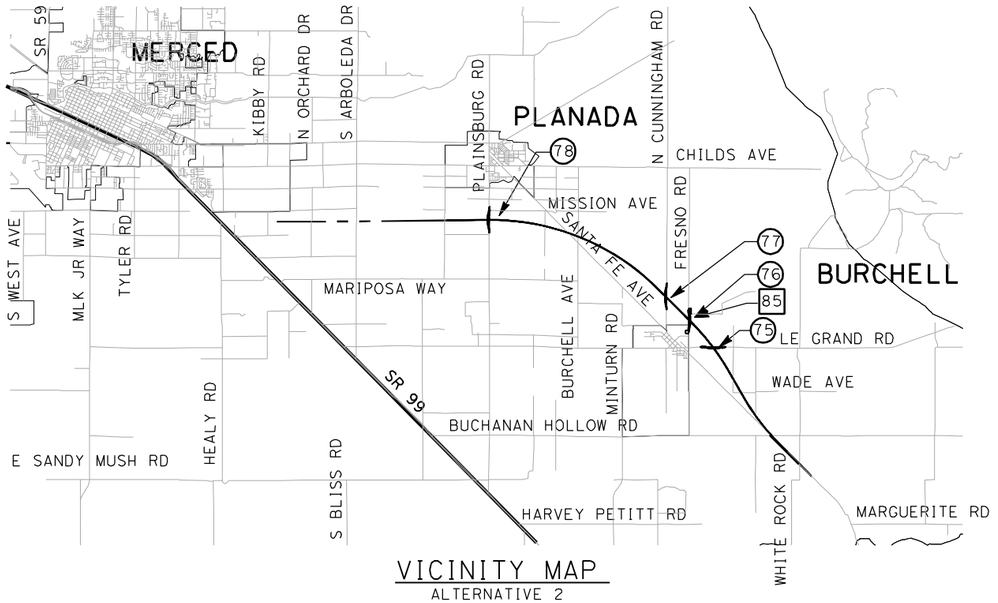
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MAIN LINE
AVENUE 21
STRUCTURE INDEX MAP
SHEET 1 OF 2

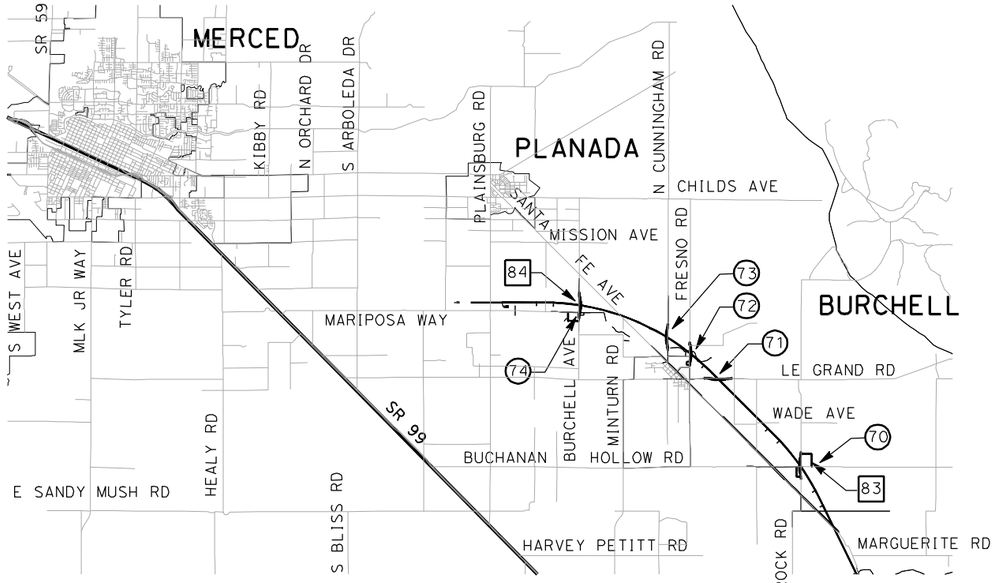
CONTRACT NO. HSR06-007
DRAWING NO. SB0201
SCALE As shown
SHEET NO. 0F

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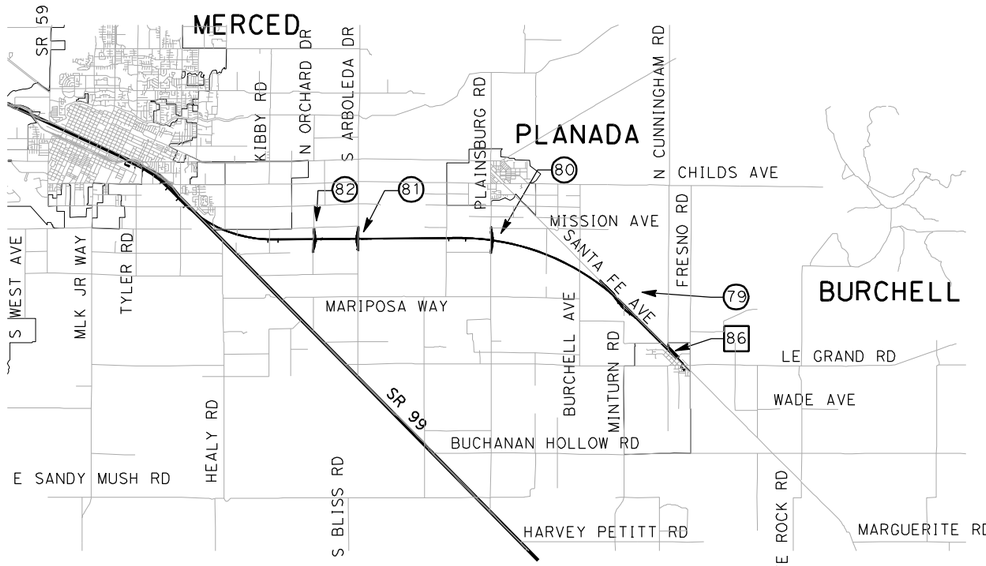
| LOCATION NO. | SHEET TITLE | STRUCTURE DWG NO. | ROADWAY DWG NO. |
|---|---|---|---|
| (70) | WHITE ROCK ROAD OVERHEAD | ST1050 | CT0200-A - CT0202-A |
| (71) | LE GRAND ROAD OVERHEAD | ST1051 | CT0203-A - CT0205-A |
| (72) | FRESNO ROAD OVERHEAD | ST1052 | CT0206-A - CT0208-A |
| (73) | CUNNINGHAM ROAD OVERHEAD | ST1053 | CT0209-A - CT0211-A |
| (74) | BURCHELL AVENUE OVERHEAD | ST1054 | CT0212-A - CT0214-A |
| (75) | LE GRAND ROAD OVERHEAD | ST1055 | CT0250-A - CT0252-A |
| (76) | FRESNO ROAD OVERHEAD | ST1056 | CT0253-A - CT0255-A |
| (77) | CUNNINGHAM ROAD OVERHEAD | ST1057 | CT0256-A - CT0258-A |
| (78) | PLAINSBURG ROAD OVERHEAD | ST1058 | CT0259-A - CT0261-A |
| (79) | SANTA FE AVENUE OVERHEAD | ST1059 | CT0300-A - CT0302-A |
| (80) | PLAINSBURG ROAD OVERHEAD | ST1060 | CT0303-A - CT0305-A |
| (81) | SOUTH ARBOLEDA DRIVE OVERHEAD | ST1061 | CT0306-A - CT0308-A |
| (82) | SOUTH ORCHARD DRIVE OVERHEAD | ST1062 | CT0309-A - CT0311-A |
| [83] | LOCAL ROAD - WHITE ROCK | | |
| [84] | LOCAL ROAD - BURCHELL | | |
| [85] | LOCAL ROAD - FRESNO | | |
| [86] | LOCAL ROAD - SANTA FE | | |




VICINITY MAP
ALTERNATIVE 2




VICINITY MAP
ALTERNATIVE 1




VICINITY MAP
ALTERNATIVE 3

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

⟨X⟩ - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

9000 0 9000 18000
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. Lee
DRAWN BY E. CISNEROS
CHECKED BY J. ZANDIAN
IN CHARGE A. Boone
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

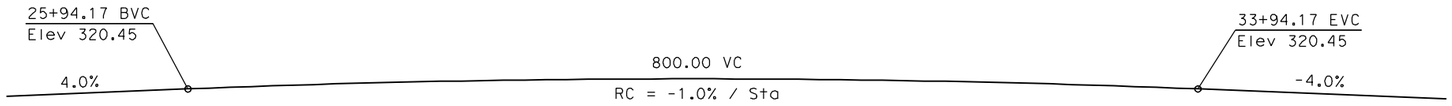

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL


CALIFORNIA HIGH-SPEED RAIL AUTHORITY

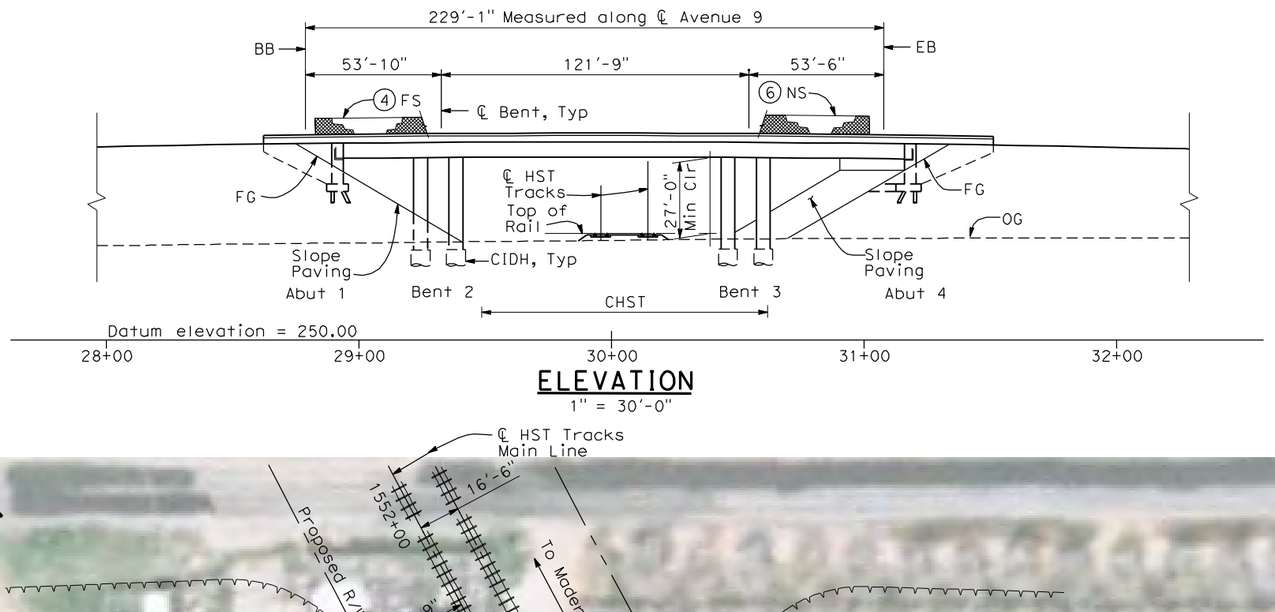
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MERCED CONNECTION
AVENUE 21
STRUCTURE INDEX MAP
SHEET 2 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. SB0202
SCALE As shown
SHEET NO. OF

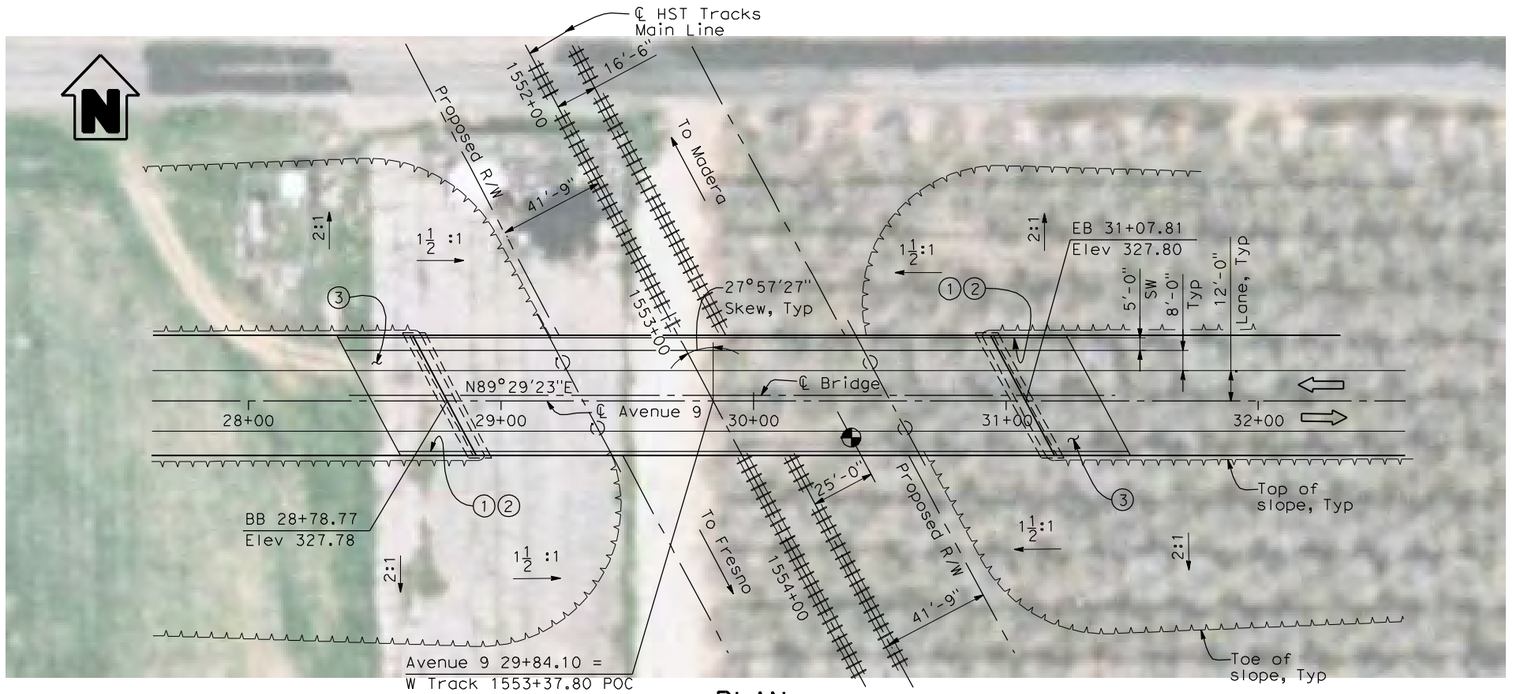

I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A11\15% cost reduction submittal\GradeStructure\A1 Ave 21 noncaltrans\SB0202.dgn 5/1/2011 5:24:08 PM cisnerose



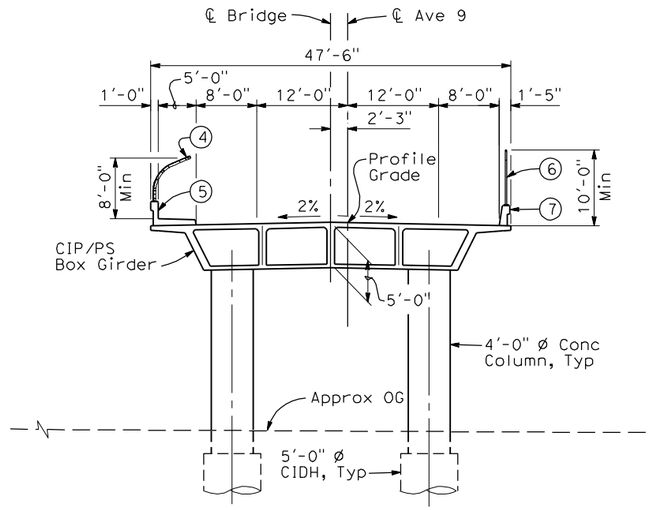

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 9 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 9 to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 5'-0" |
| LENGTH | = | 229'-1" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,880 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 1**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

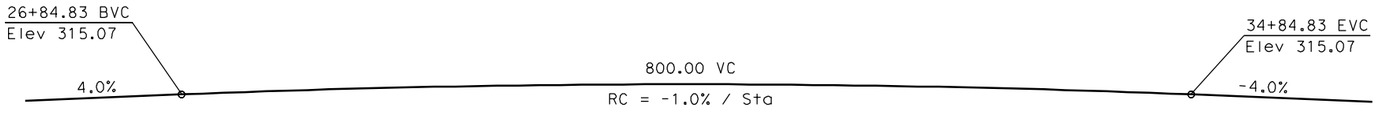
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

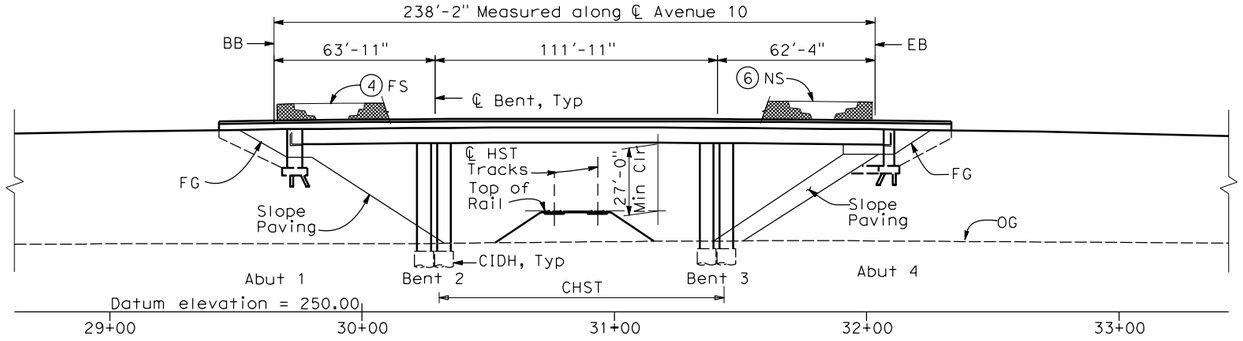
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 9 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1001
SCALE As shown
SHEET NO. OF

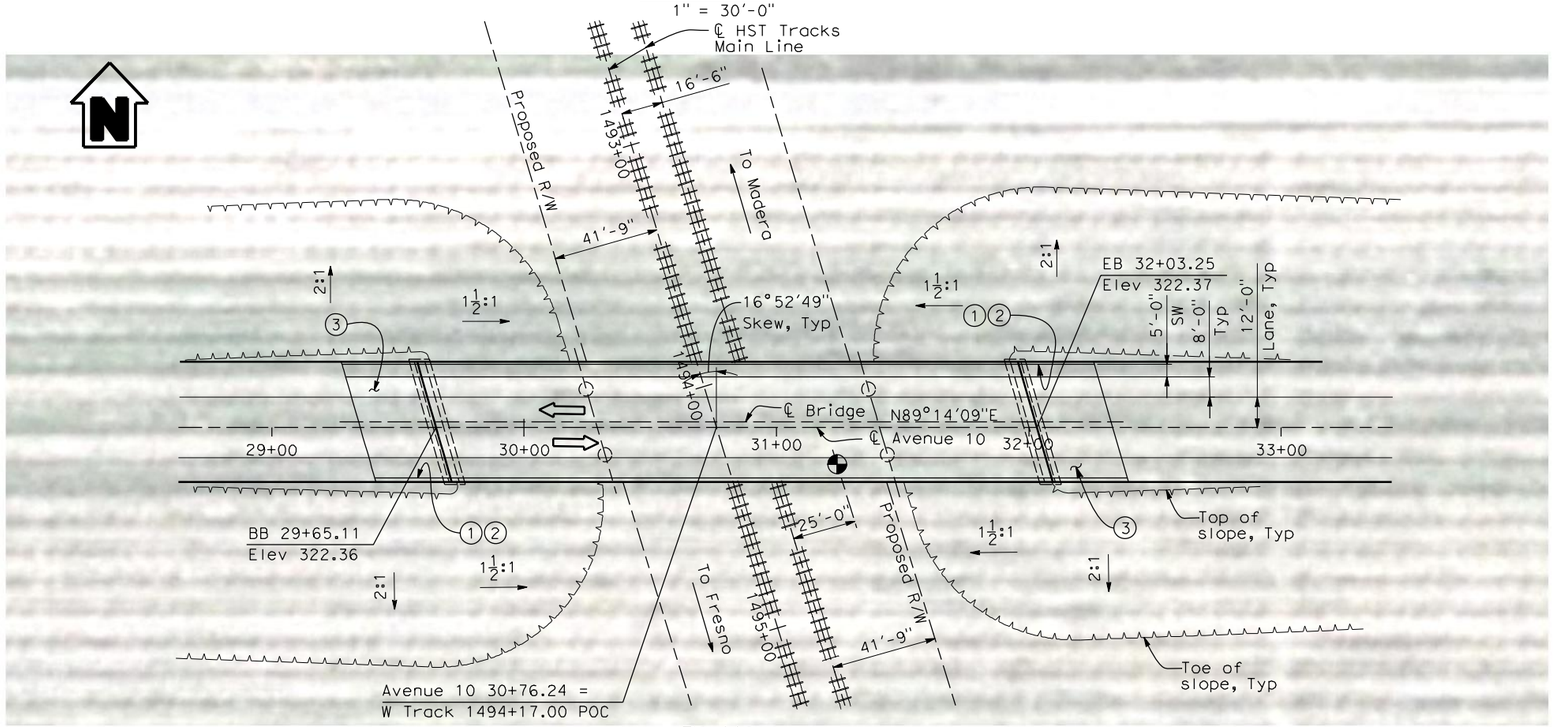
cisnerose 4/28/2011 4:30:40 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\A1-21ML2\W-ML-ST-OH_Ave 9.dgn



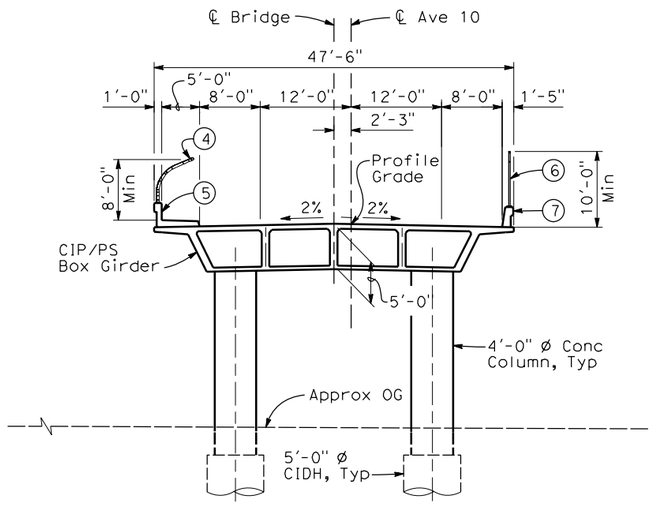

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 10 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 10 to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 5'-0" |
| LENGTH | = | 238'-2" |
| WIDTH | = | 47'-6" |
| AREA | = | 11,312 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 2**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 01/13/12 | HL | JR | AB | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. BOONE
DATE 01/13/2012

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

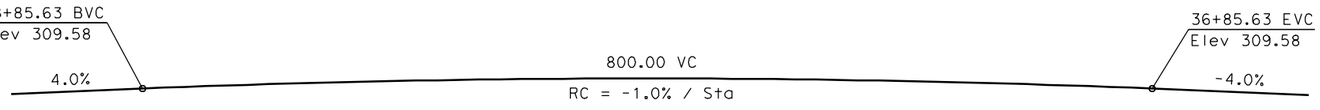
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

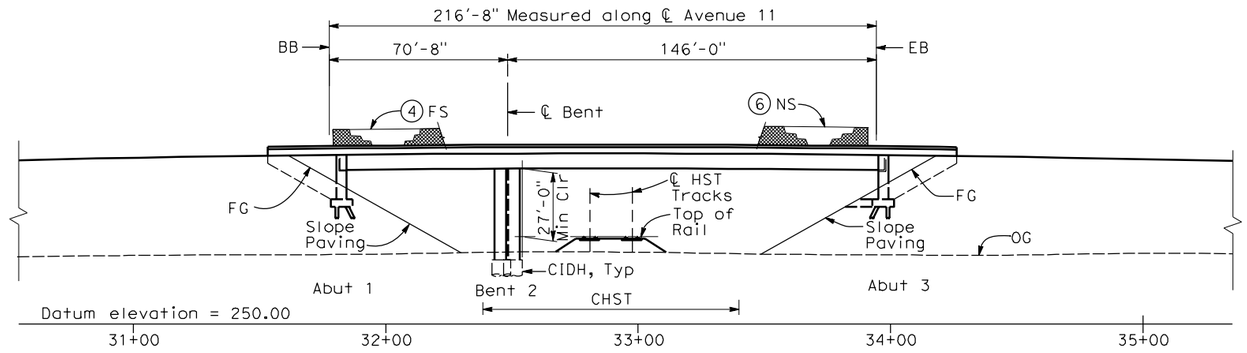
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 10 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1002
SCALE As shown
SHEET NO. OF

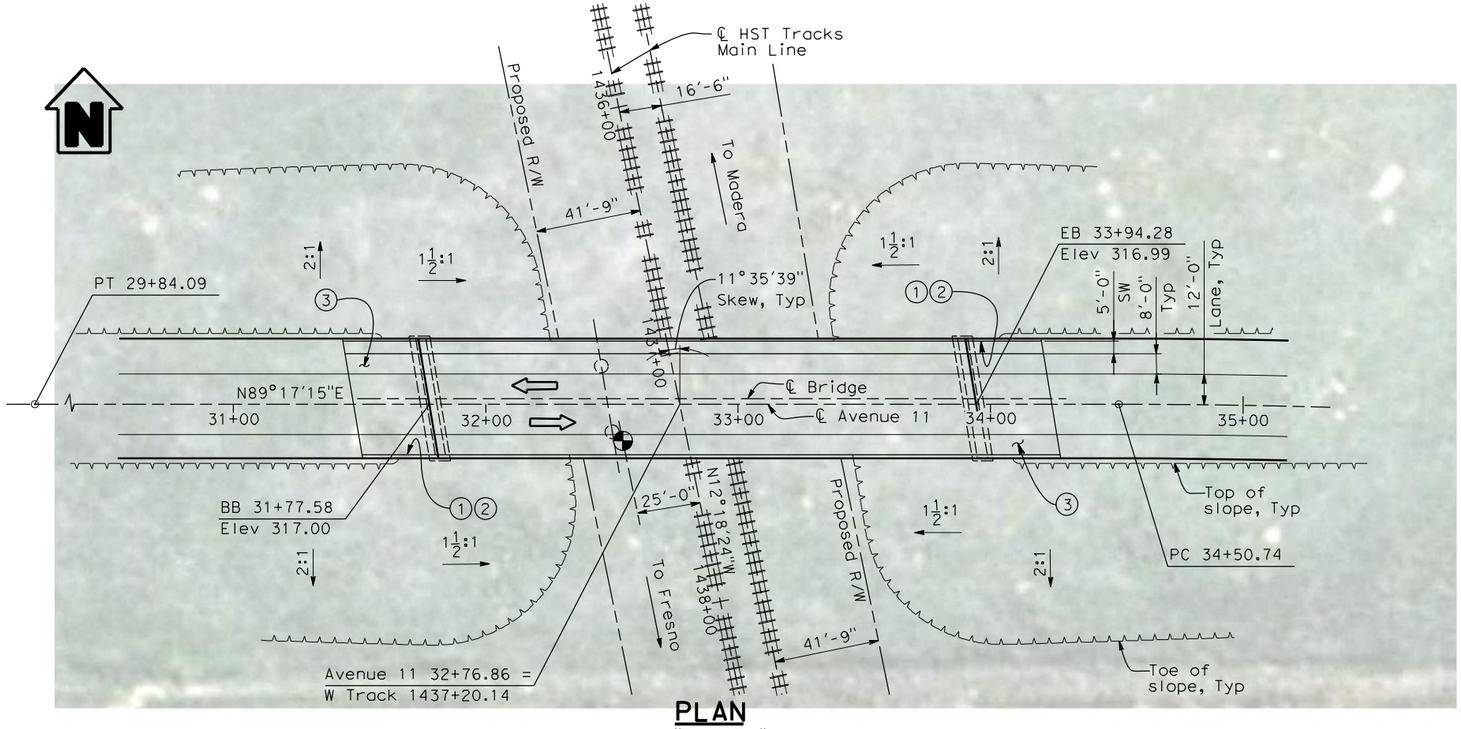
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cisnerose



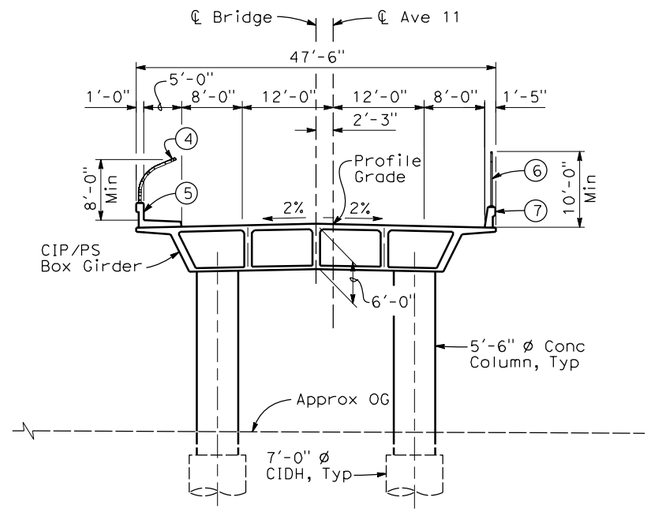

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 11 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 11 to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 216'-8" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,294 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 3**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 01/13/12 | HL | JR | AB | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. BOONE
DATE 01/13/2012

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

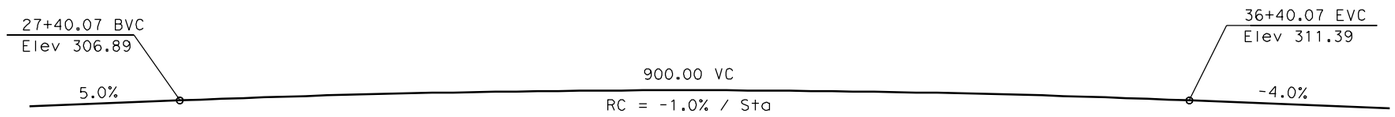
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

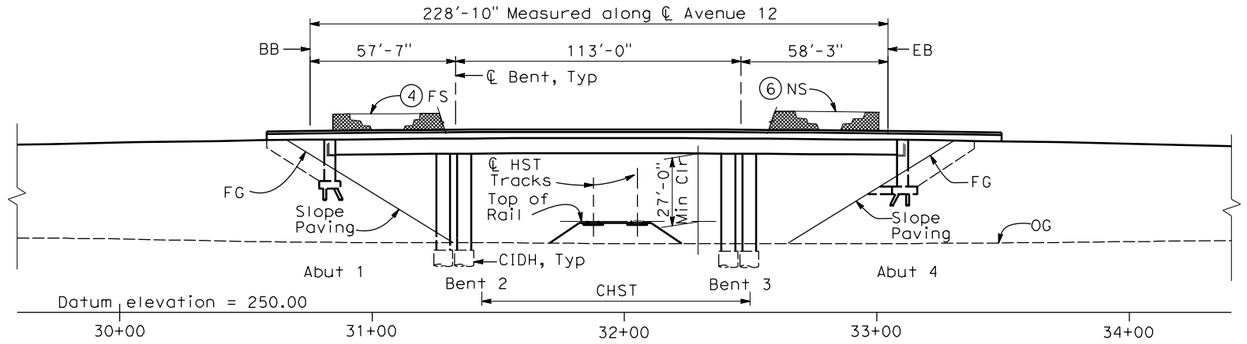
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 11 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1003
SCALE As shown
SHEET NO. OF

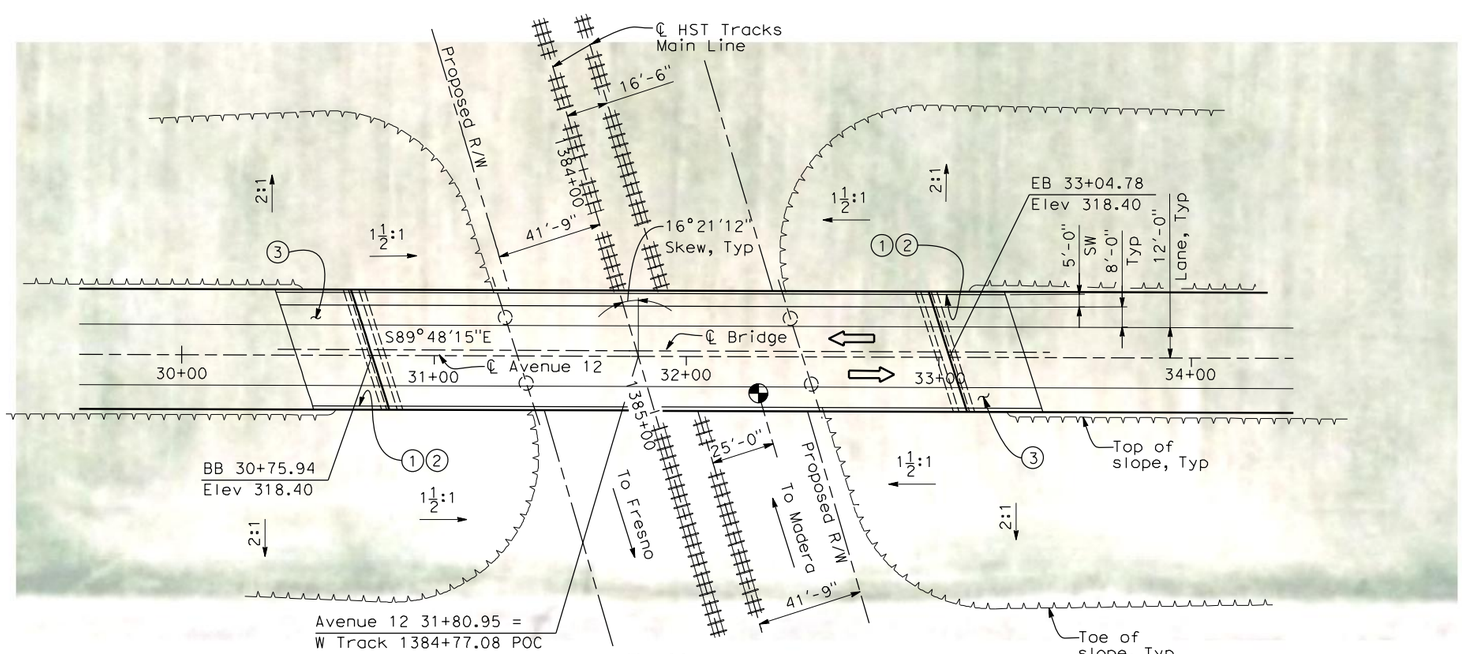
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cisneros



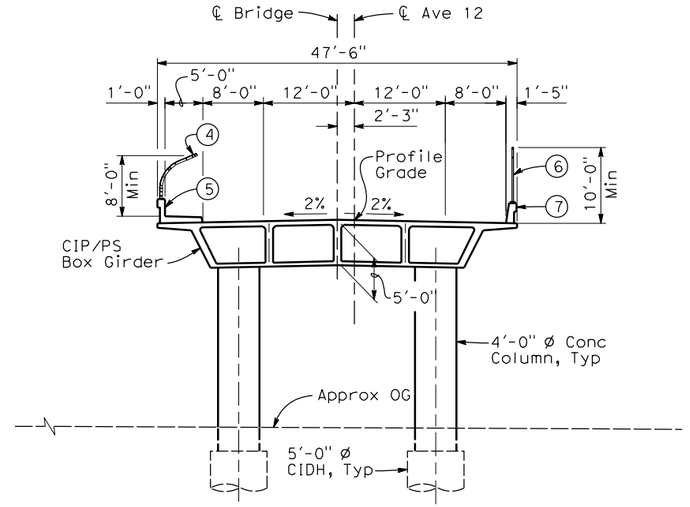

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 12 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 12 to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

◒ Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 5'-0" |
| LENGTH | = | 228'-10" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,870 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 4**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 01/13/12 | HL | JR | AB | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. BOONE
DATE 01/13/2012

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

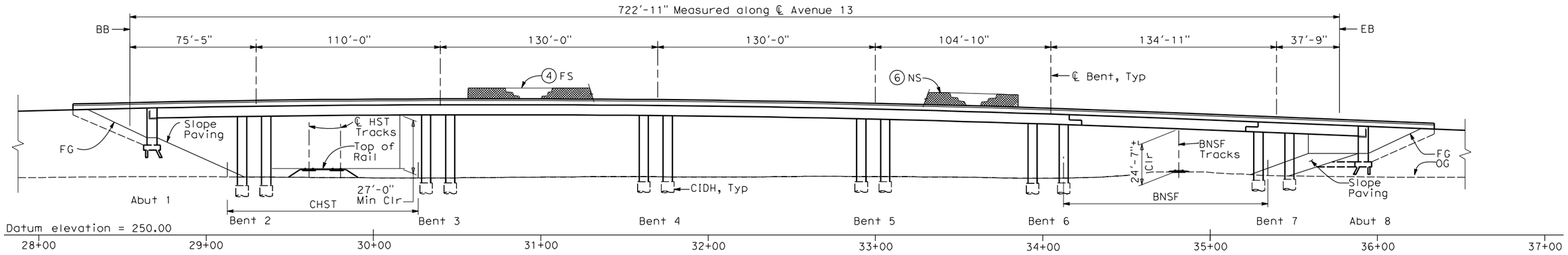
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 12 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1004
SCALE As shown
SHEET NO. OF

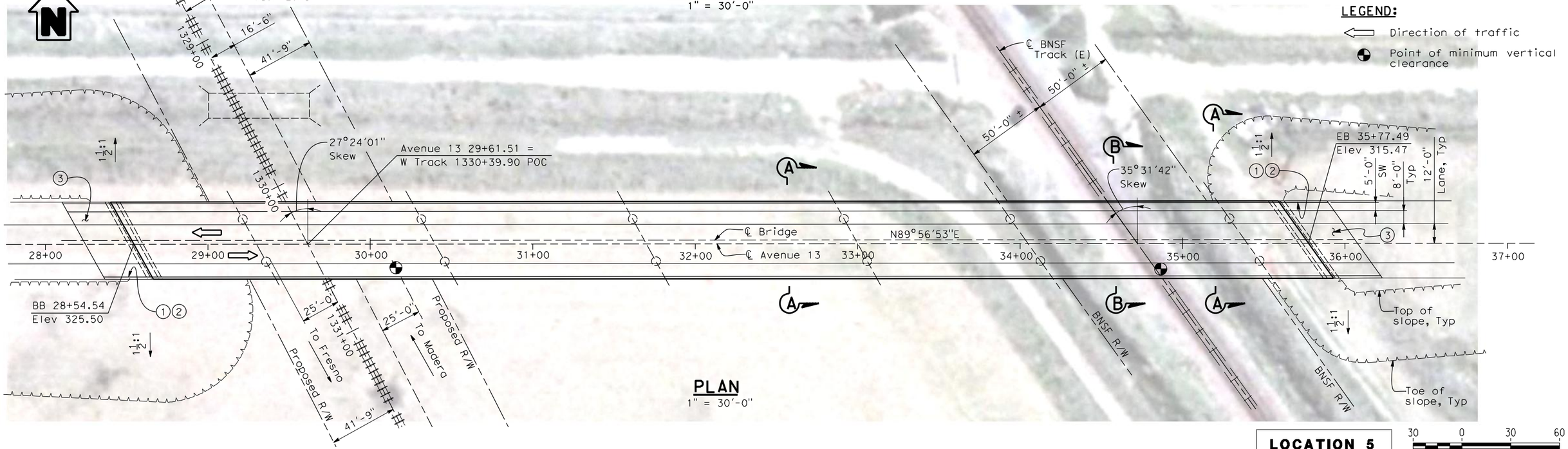
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cisnerose




## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"

**LEGEND:**

⇦ Direction of traffic

Point of minimum vertical clearance

**LOCATION 5**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 01/13/12 | HL | JR | AB | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. BOONE
DATE 01/13/2012

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811

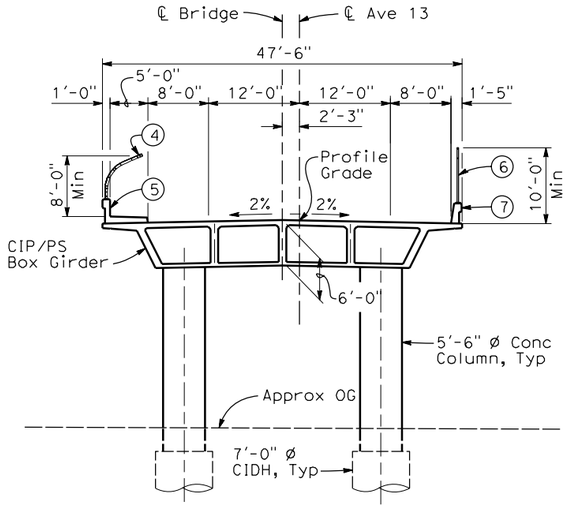
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MAIN LINE
AVENUE 21
AVENUE 13 OVERHEAD
PLANNING STUDY - SHEET 1 OF 2

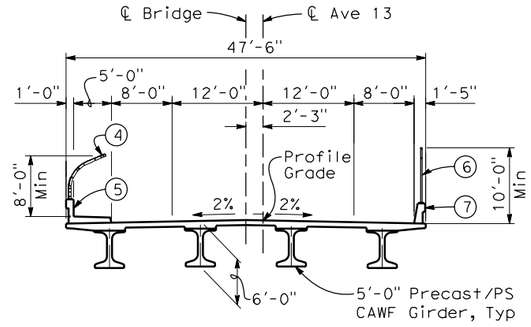
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DRAWING NO. ST1005
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SHEET NO. OF

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cisnerose




## SECTION A-A

1"=10'-0"




## SECTION B-B

1"=10'-0"

| | |
|---|---|
| DATE OF ESTIMATE | |
| BRIDGE REMOVAL | = |
| STRUCTURE DEPTH | = 6'-0" |
| LENGTH | = 722'-11" |
| WIDTH | = 47'-6" |
| AREA | = 34,340 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = |
| TOTAL COST | = |

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 13 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 13 to be determined.
9. Existing underground and overhead utilities to be determined.

**LOCATION 5**

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 01/13/12 | HL | JR | AB | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. BOONE
DATE 01/13/2012

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811

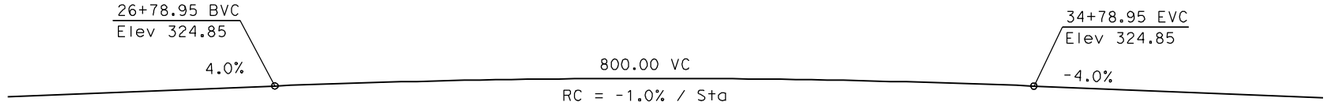
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 13 OVERHEAD
PLANNING STUDY - SHEET 2 OF 2

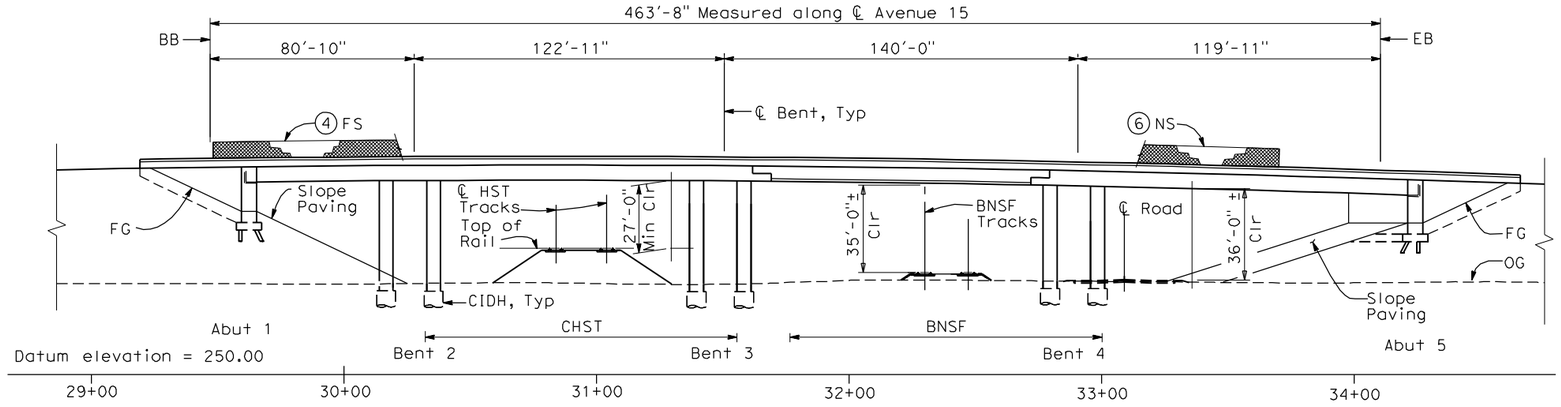
CONTRACT NO. HSR06-007
DRAWING NO. ST1005A
SCALE As shown
SHEET NO. OF

cisnerose 3/30/2012 2:49:14 PM \\usscr1fp001\Cadd\CHSR\60022962\Task-03_Merced-Fresno\cadd\Struct\Sheet\15%_Grade Structures_Revisions\W-ML-ST-OH_Ave 13a.dgn

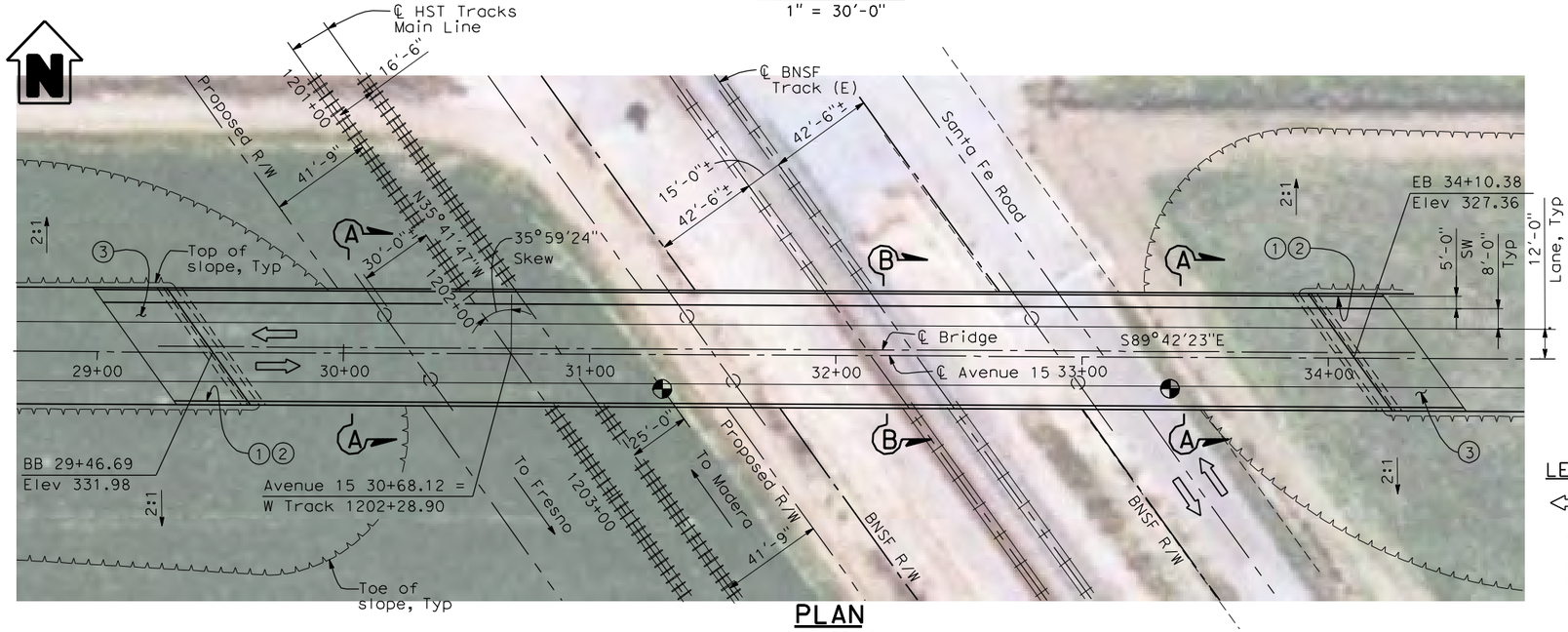



## PROFILE GRADE
NTS

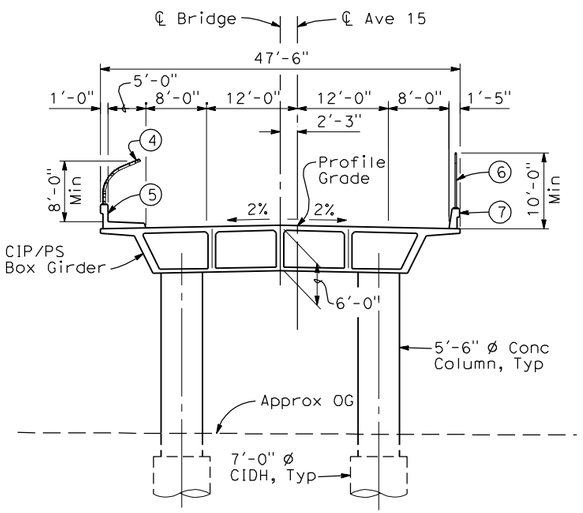
| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 463'-8" |
| WIDTH | = | 47'-6" |
| AREA | = | 22,026 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |



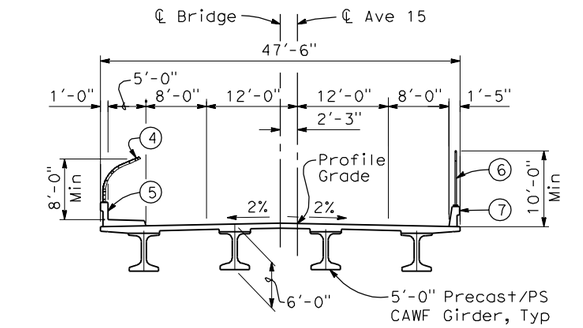

## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## SECTION A-A
1"=10'-0"




## SECTION B-B
1"=10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 15 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 15 to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

Point of minimum vertical clearance

Pt = Petroleum
UG = Underground

**LOCATION 6**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**
**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 15 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1006
SCALE As shown
SHEET NO. OF

cisnerose 4/28/2011 4:42:18 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\A1-21ML2\W-ML-ST-OH_Ave 15.dgn

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4/28/2011 4:45:39 PM
cisnerose

20+62.41 BVC
Elev 330.53

4.0%

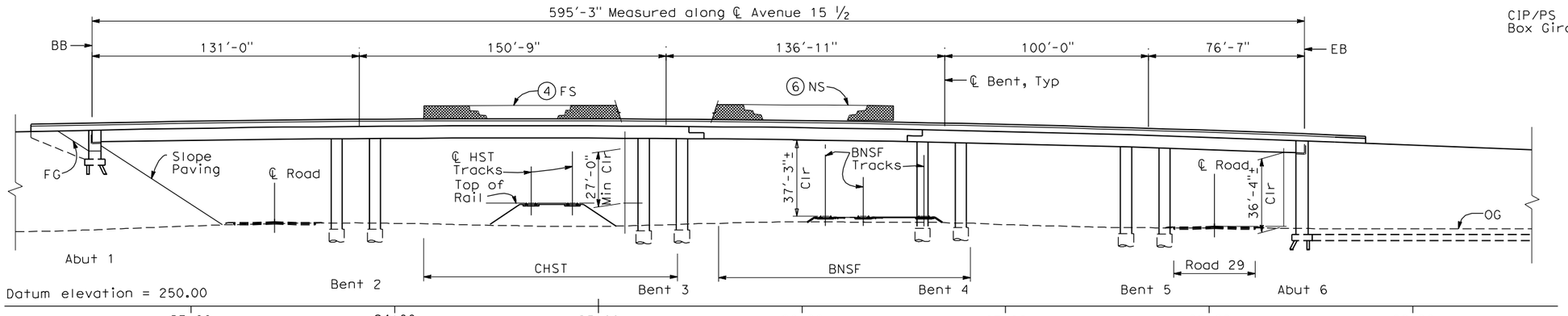
800.00 VC
RC = -1.0% / Sta

-4.0%

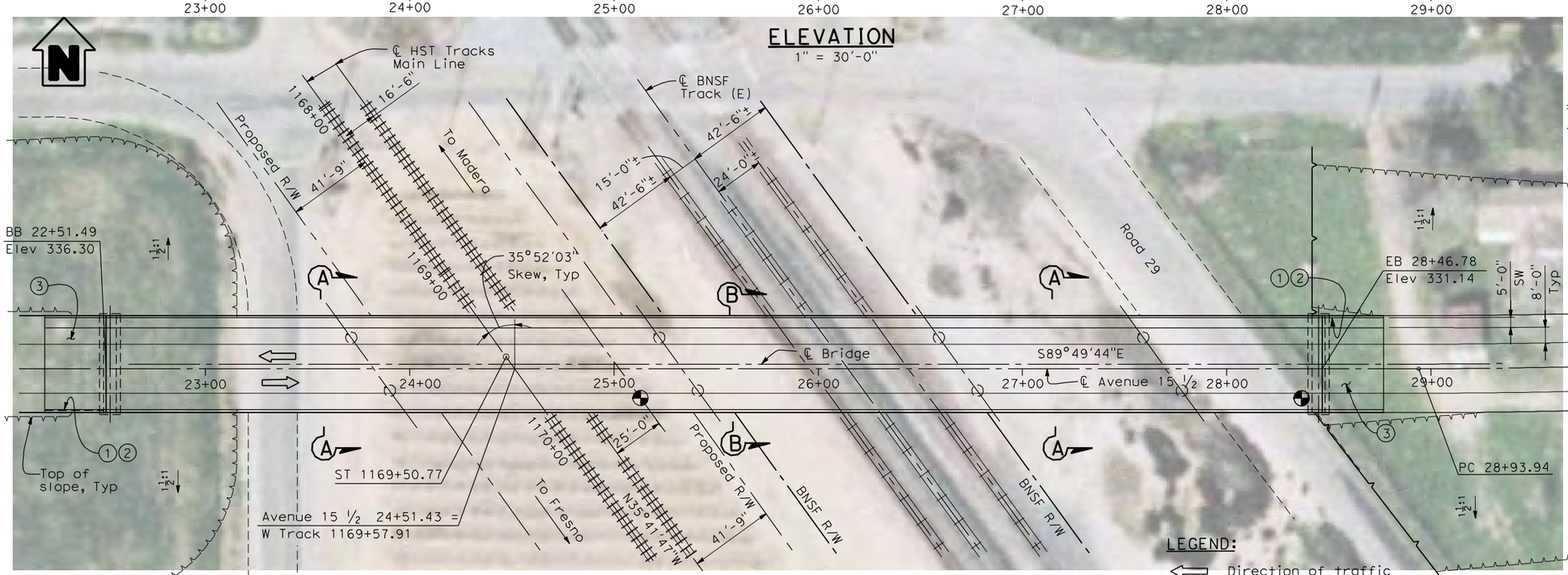
28+62.41 EVC
Elev 330.53

## PROFILE GRADE
NTS

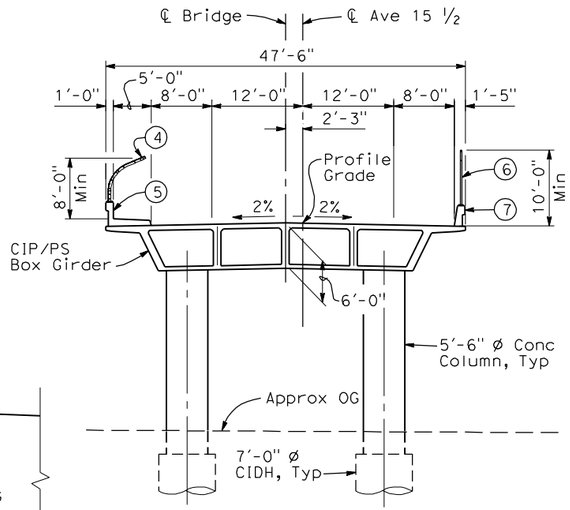
| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 595'-3" |
| WIDTH | = | 47'-6" |
| AREA | = | 28,280 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |



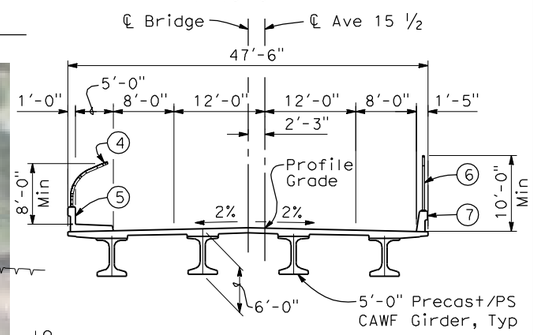

## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## SECTION A-A
1"=10'-0"




## SECTION B-B
1"=10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 15 ½ OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 15 ½ to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

Point of minimum vertical clearance

Pt = Petroleum
UG = Underground

**LOCATION 7**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

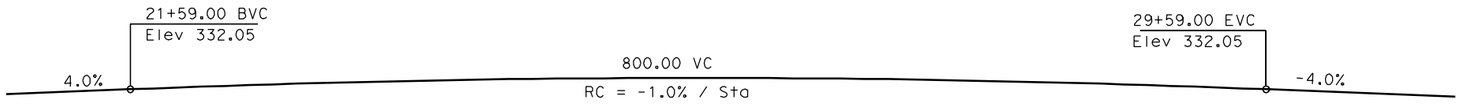
**NOT FOR CONSTRUCTION**

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

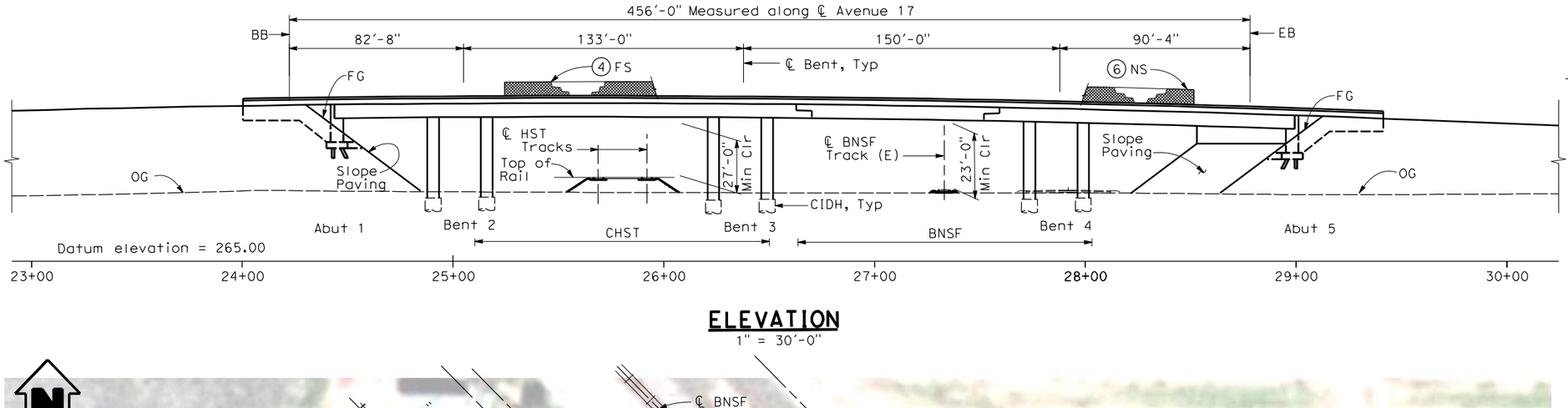
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MAIN LINE
AVENUE 21
AVENUE 15½ OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1007
SCALE As shown
SHEET NO. OF

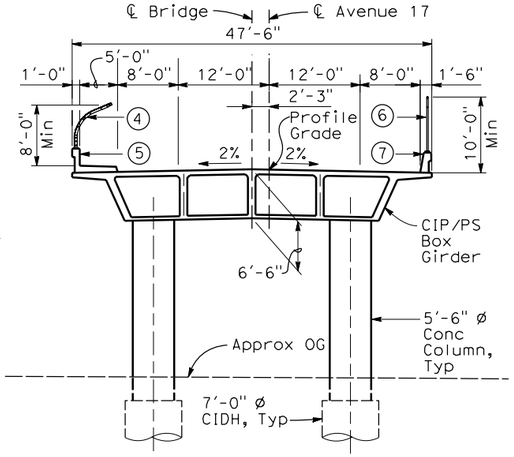



## PROFILE GRADE
NTS

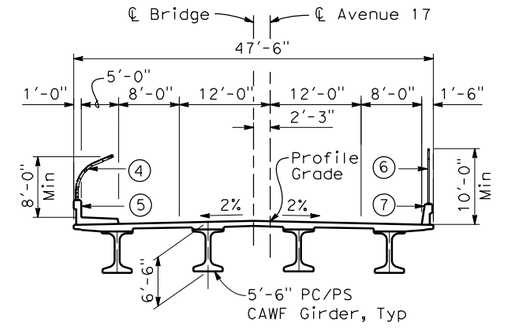
| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-6" |
| LENGTH | = | 456'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 21,660 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |



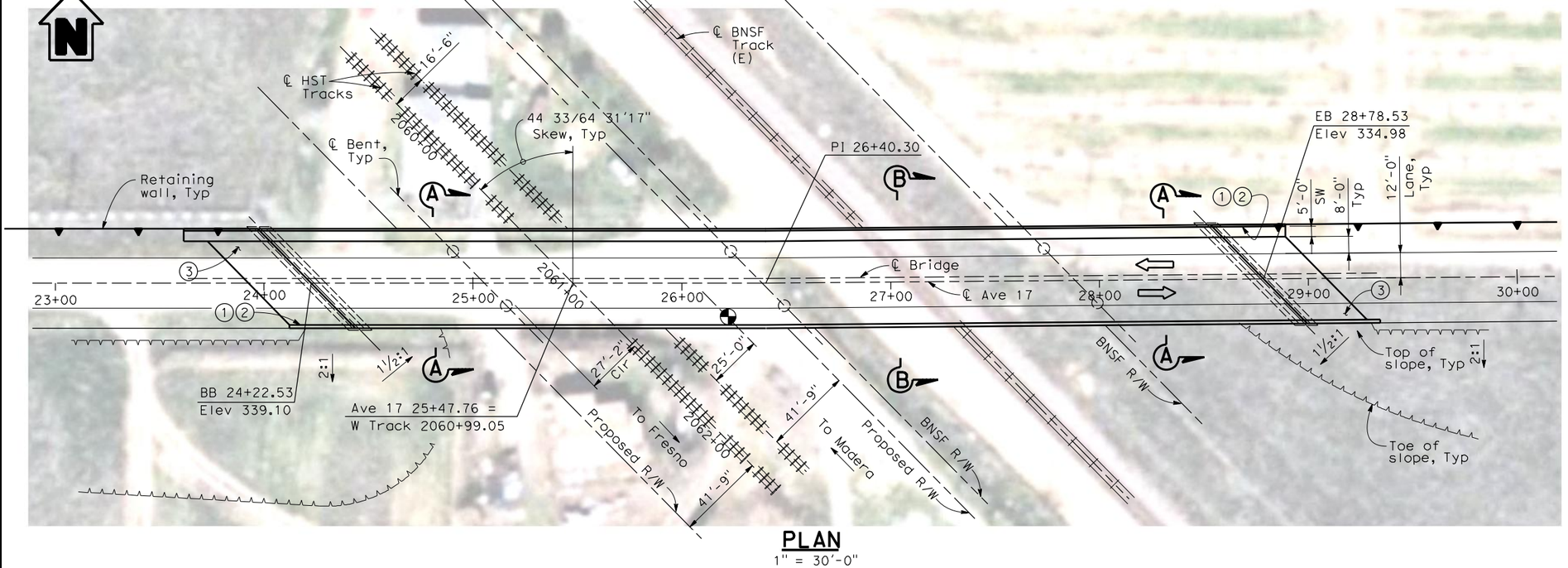

## ELEVATION
1" = 30'-0"




## SECTION A-A
1"=10'-0"




## SECTION B-B
1"=10'-0"




## PLAN
1" = 30'-0"

### NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 17 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 17 and BNSF track to be determined.
9. Existing underground and overhead utilities to be determined.

30 0 30 60
1"=30'

**LOCATION 9**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 04/11/12 | HL | EC | AB | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/11/2012

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300 Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

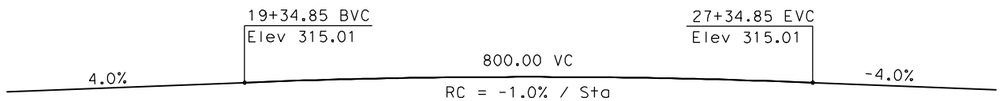
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
AVENUE 17 OVERHEAD
PLANNING SYUDY

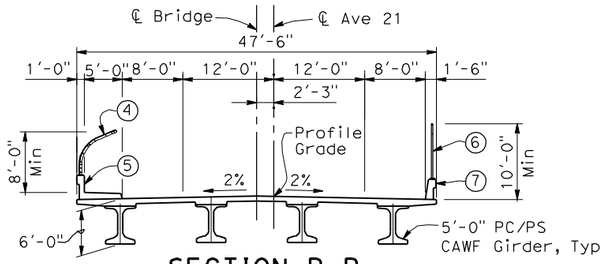
CONTRACT NO.
DRAWING NO. ST1009
SCALE As shown
SHEET NO. OF

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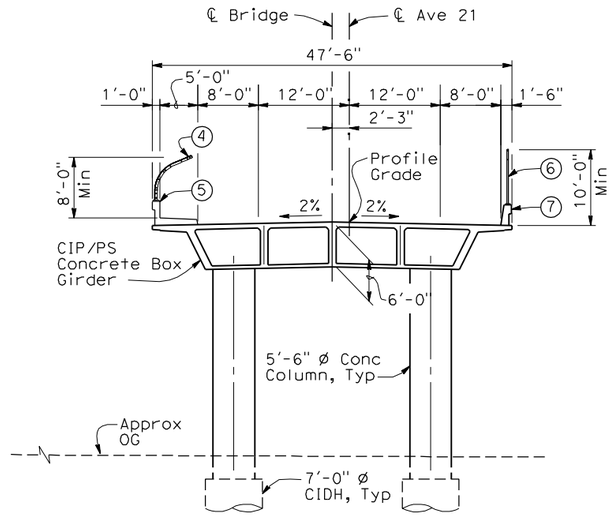
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cisnerose



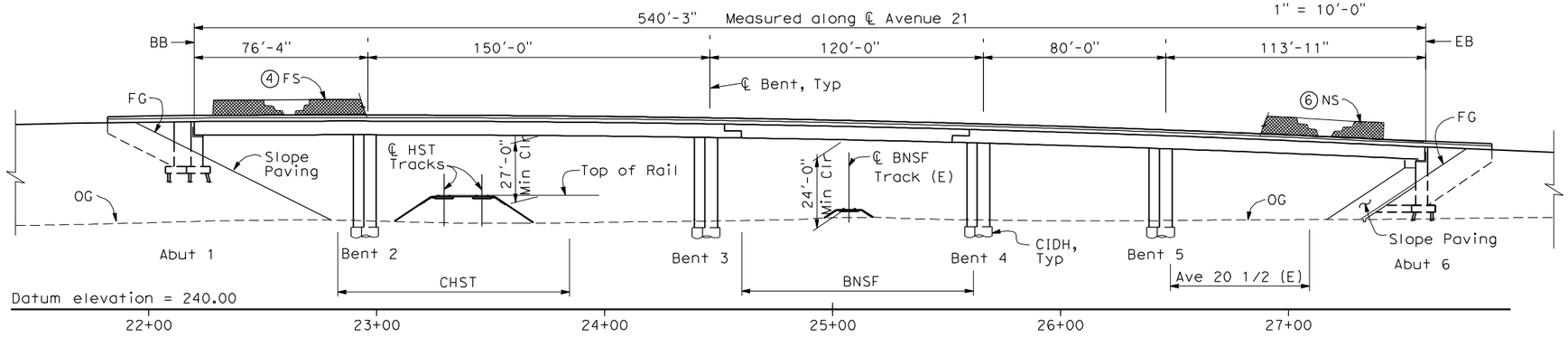

## PROFILE GRADE
NTS



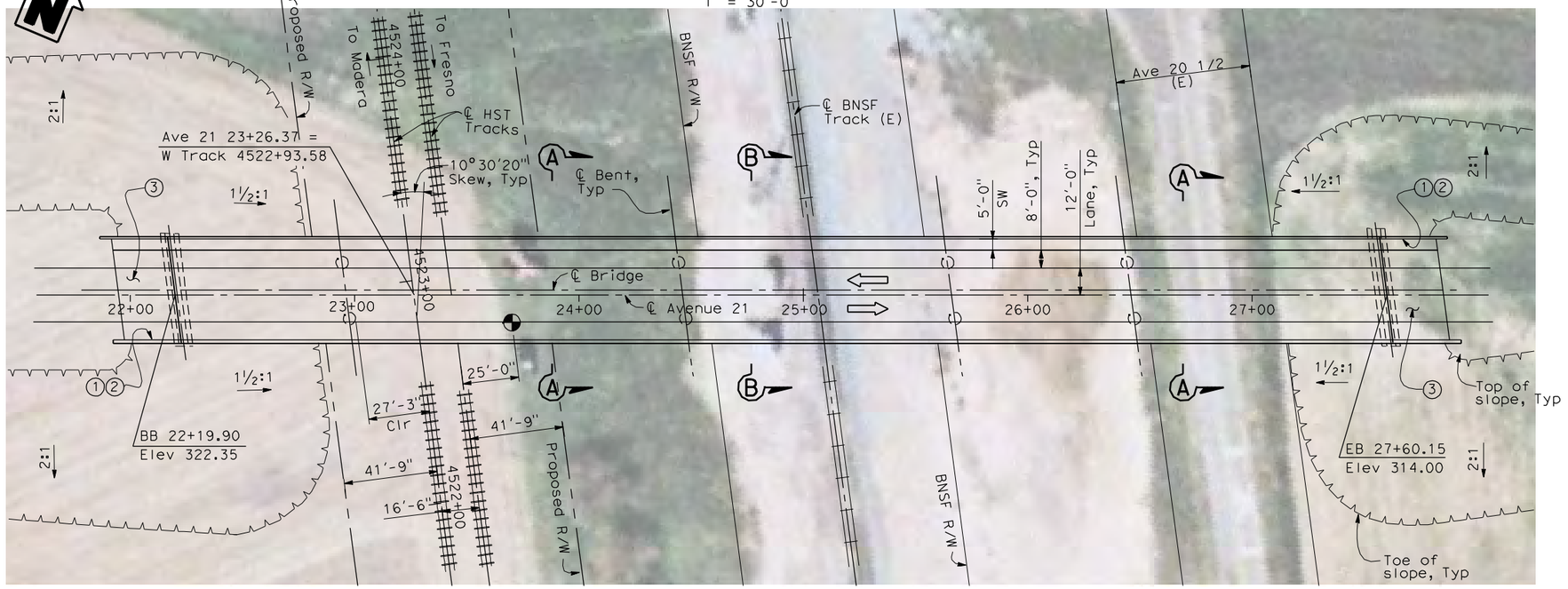

## SECTION B-B
1" = 10'-0"




## SECTION A-A
1" = 10'-0"




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"

NOTES:

1. Paint "Bridge No. xx-xx"
2. Paint "Avenue 21 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.
9. Location and elevation of existing BNSF track to be determined.

LEGEND:

⇦ Direction of traffic

◒ Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 540'-3" |
| WIDTH | = | 47'-6" |
| AREA | = | 25,660 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 12**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. TANG
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

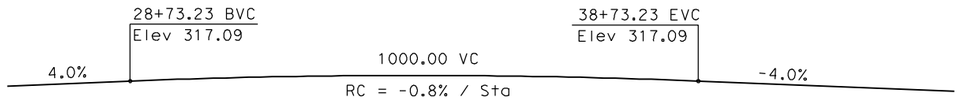
AECOM Technical Services, Inc.
2020 L Street, Suite 300 Sacramento, CA 9581
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 21 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1012
SCALE AS SHOWN
SHEET NO. OF

I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\From Oakland\W-MF-ST1013.dgn
4/30/2011 4:14:58 PM
cisnerose




## PROFILE GRADE
NTS

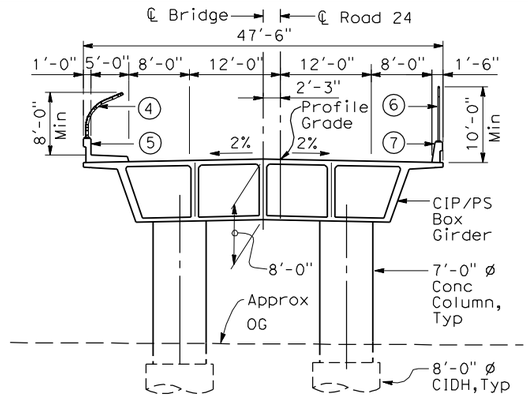
**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining Wall

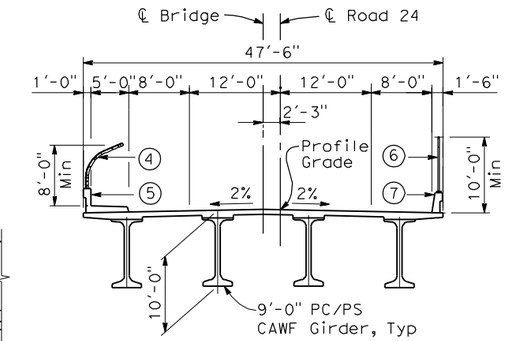
| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 8'-0" |
| LENGTH | = | 552'-9" |
| WIDTH | = | 47'-6" |
| AREA | = | 26,260 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**NOTES:**

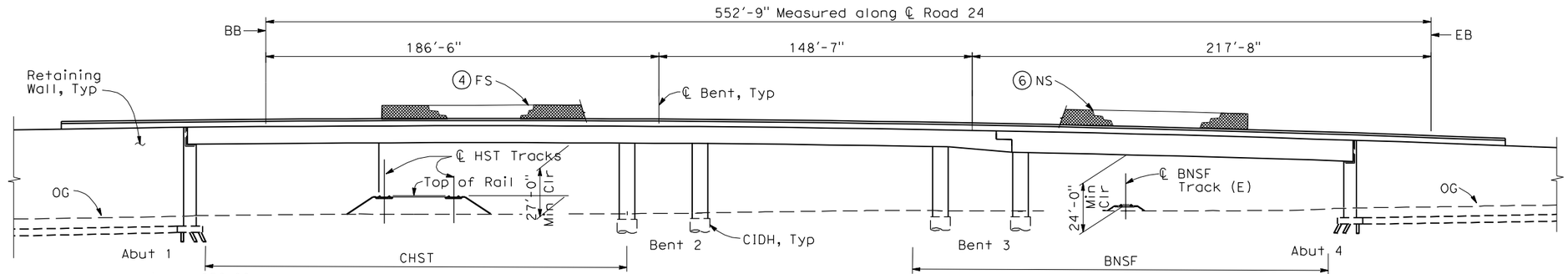
1. Paint "Bridge No. XX-XX"
2. Paint "Road 24 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Road 24 and BNSF track to be determined.
9. Existing underground and overhead utilities to be determined.
10. Location and elevation of existing BNSF track to be determined.




## SECTION A-A
1"=10'-0"



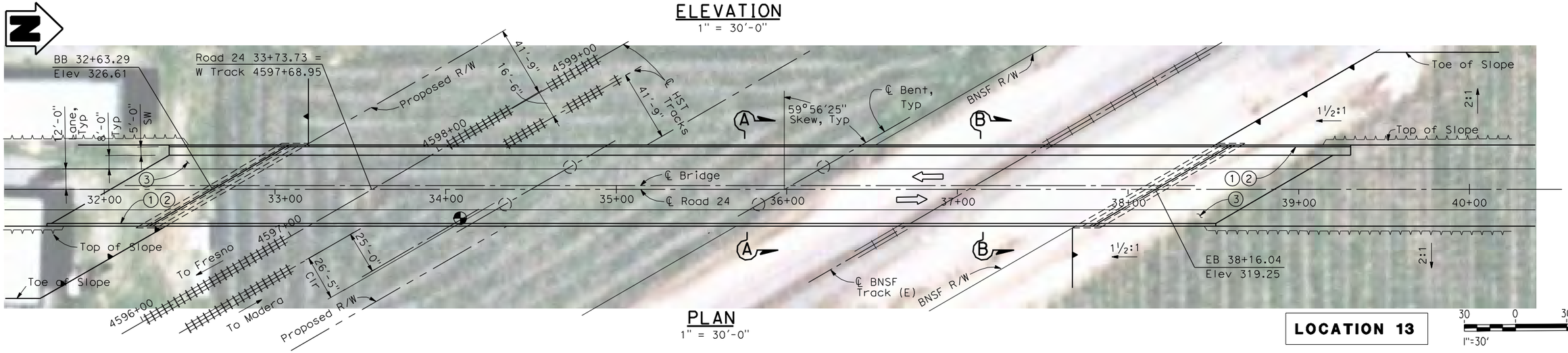

## SECTION B-B
1"=10'-0"







## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"

**LOCATION 13**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

| | |
|---|---|
| DESIGNED BY | H. LEE |
| DRAWN BY | J. HODELL |
| CHECKED BY | L. LEUNG |
| IN CHARGE | A. BOONE |
| DATE | 04/29/2011 |

**RECORD SET**
**15% DESIGN SUBMITTAL**

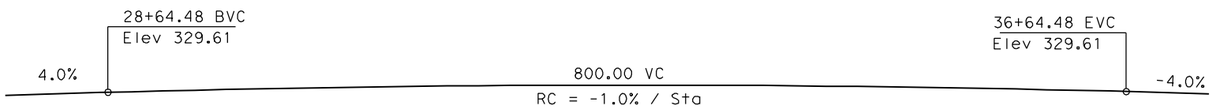
**NOT FOR CONSTRUCTION**

AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

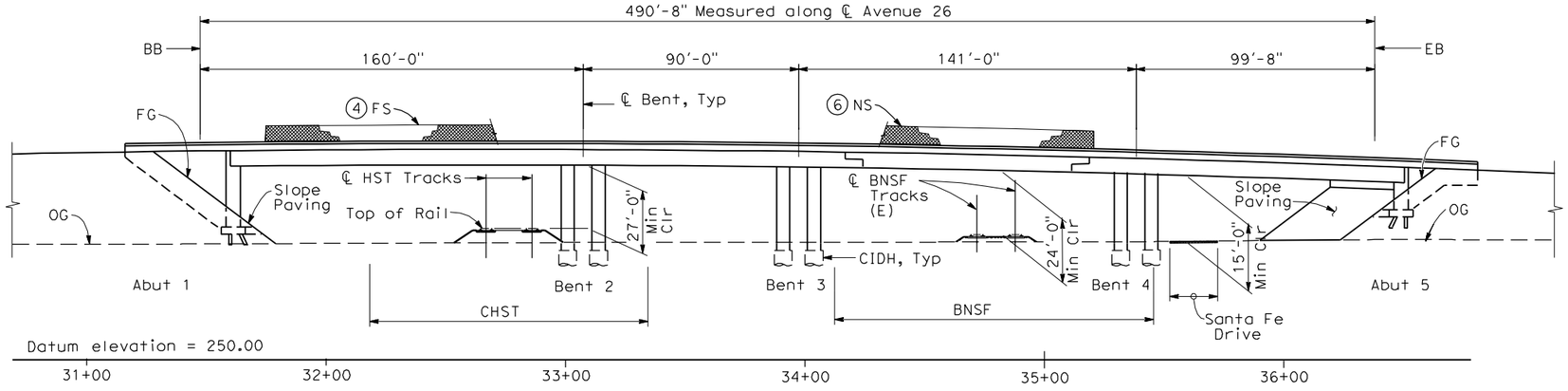
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
ROAD 24 OVERHEAD
PLANNING STUDY

| | |
|---|---|
| CONTRACT NO. | HSR06-007 |
| DRAWING NO. | ST1013 |
| SCALE | AS SHOWN |
| SHEET NO. | OF |

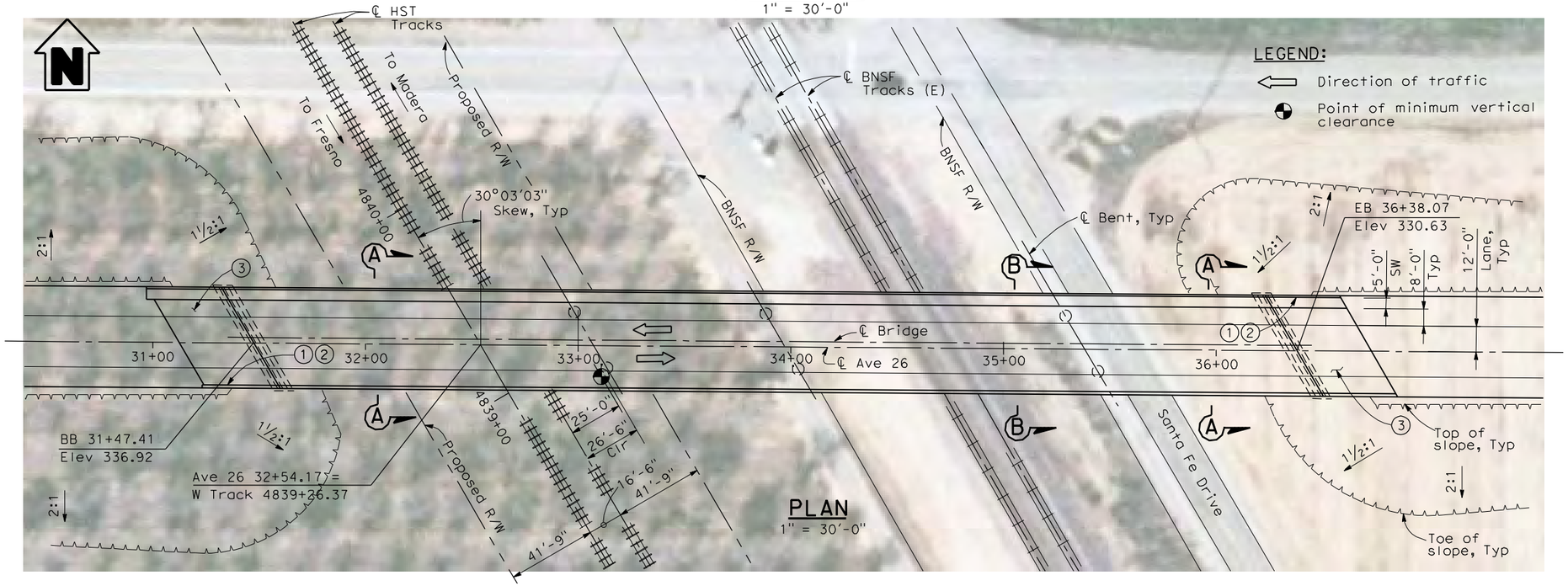



## PROFILE GRADE
NTS

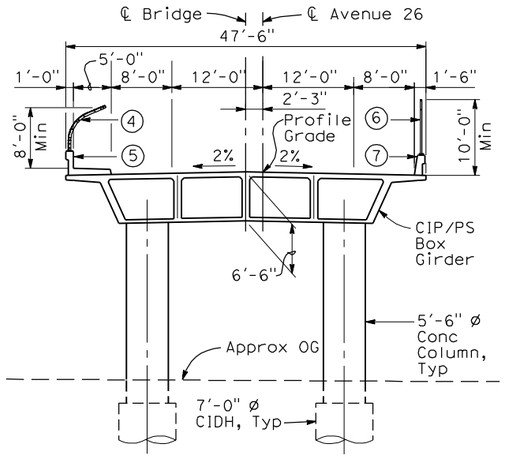
| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-6" |
| LENGTH | = | 490'-8" |
| WIDTH | = | 47'-6" |
| AREA | = | 23,310 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |



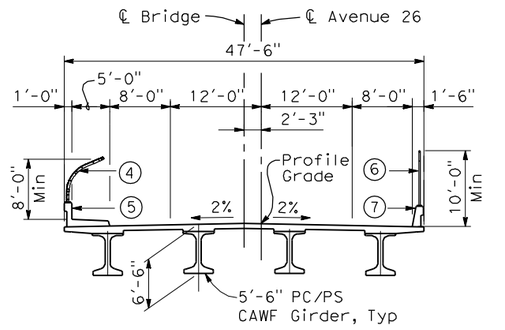

## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## SECTION A-A
1"=10'-0"




## SECTION B-B
1"=10'-0"

NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 26 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 26 and BNSF tracks to be determined.
9. Existing underground and overhead utilities to be determined.
10. Location and elevation of existing BNSF tracks to be determined.

**LOCATION 15**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

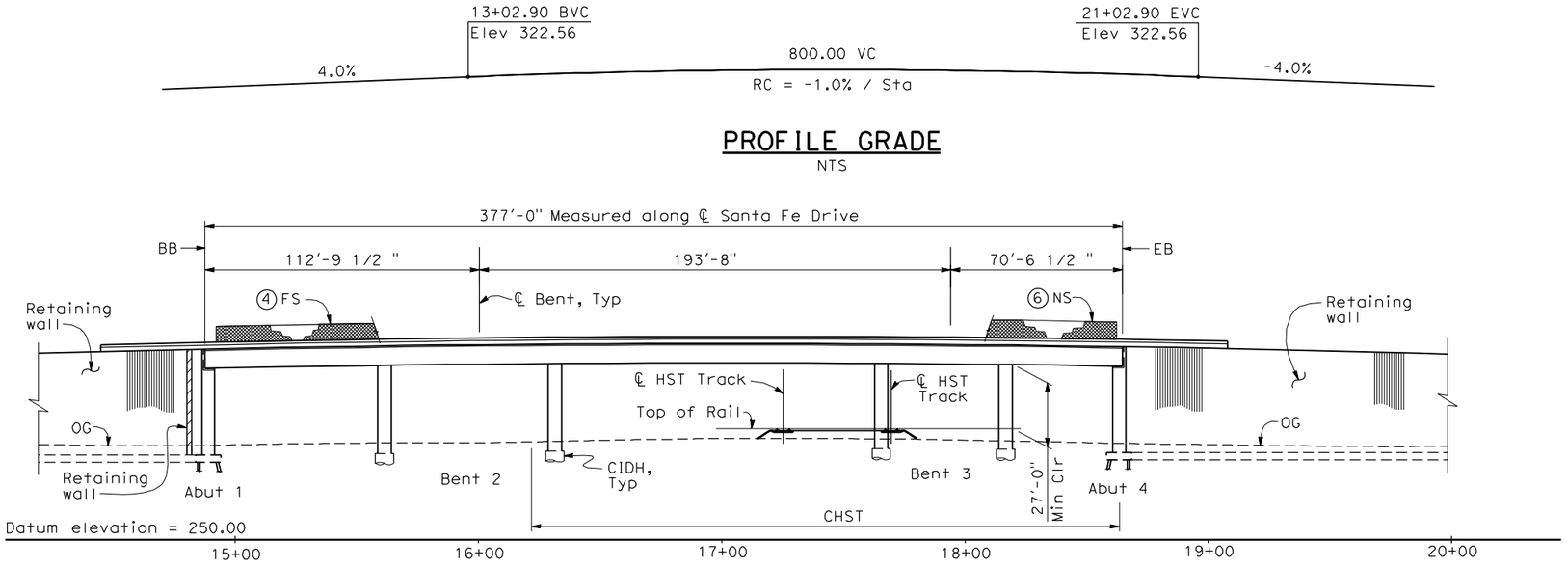
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 26 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1015
SCALE AS SHOWN
SHEET NO. OF

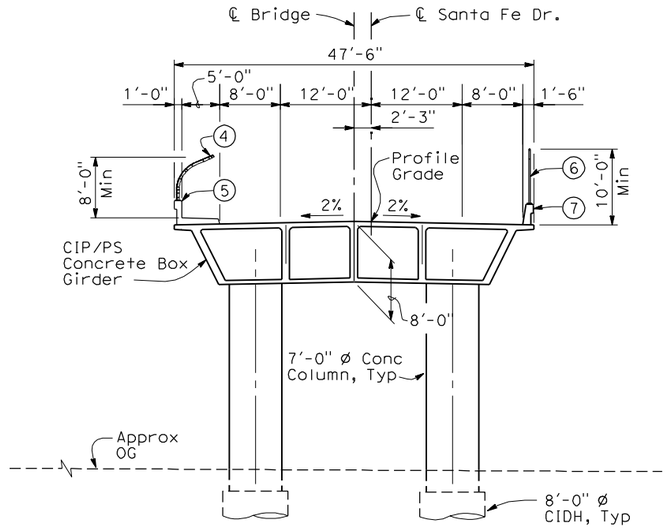
cisnerose 4/30/2011 4:16:13 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\From Oakland\W-MF-ST1015.dgn



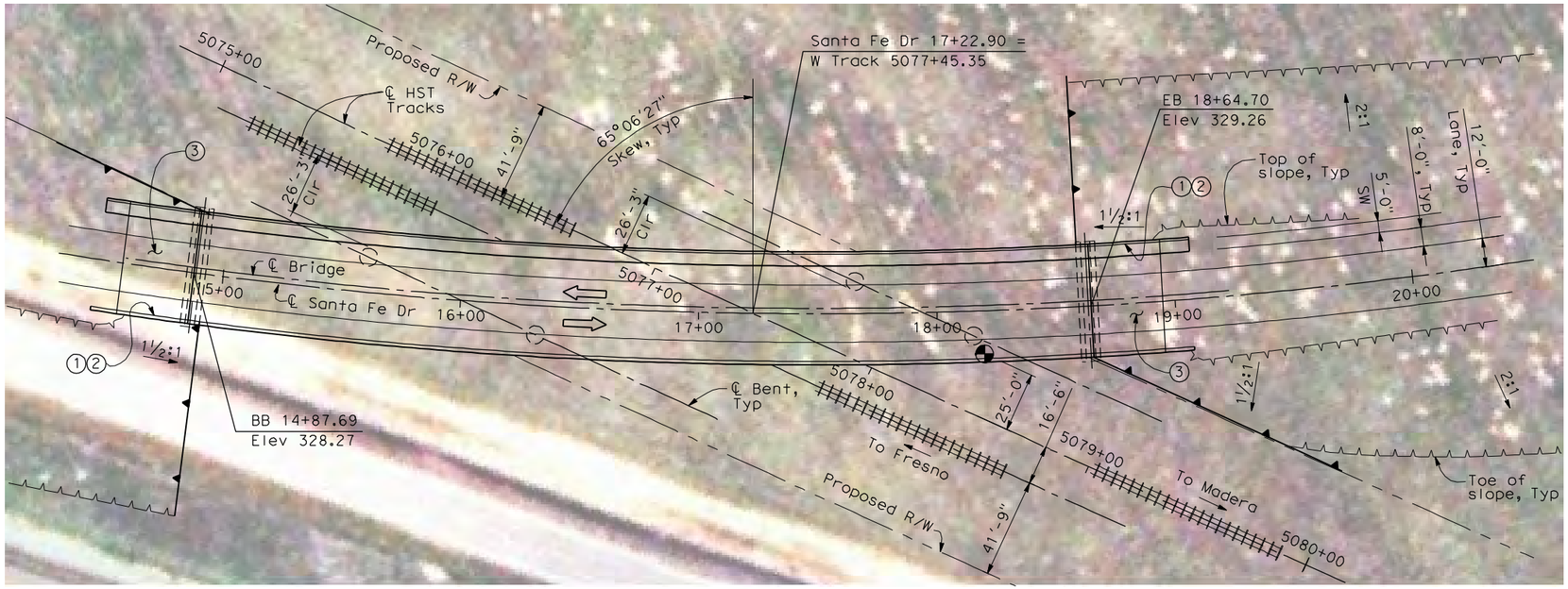

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"




## PLAN
1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. xx-xx"
2. Paint "Santa Fe Drive OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | = | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 8'-0" |
| LENGTH | = | 377'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 17,910 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 16**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY J. TANG
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

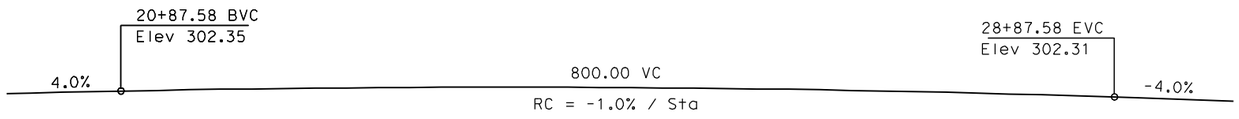
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO
BNSF MAIN LINE
AVENUE 21
SANTA FE DRIVE OVERHEAD
PLANNING STUDY

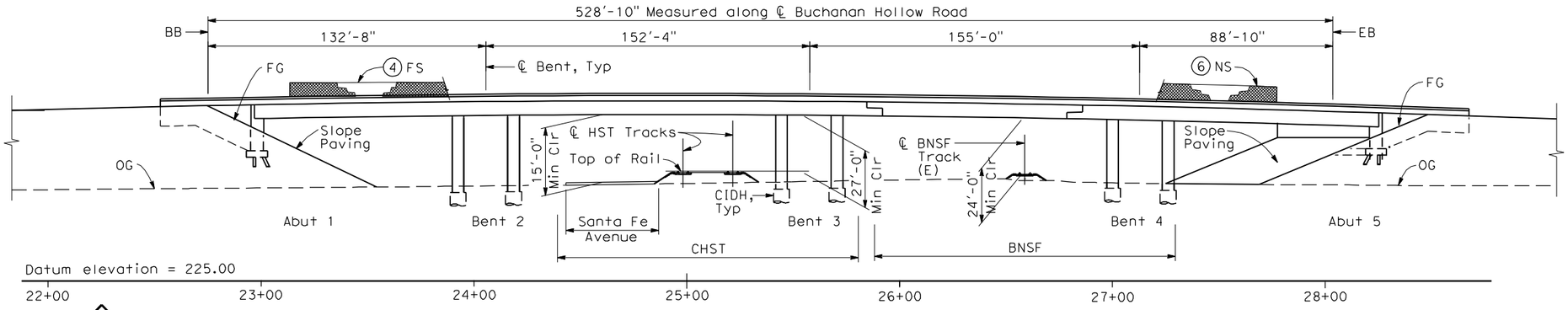
CONTRACT NO. HSR06-007
DRAWING NO. ST1016
SCALE AS SHOWN
SHEET NO. OF

4/30/2011 4:17:05 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A11\15% cost reduction submittal\GradeStructure\From Oakland\W-MF-ST1016.dgn
c:\snerose

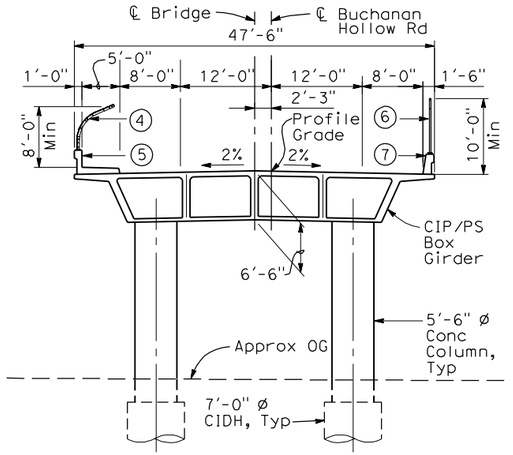



## PROFILE GRADE
NTS

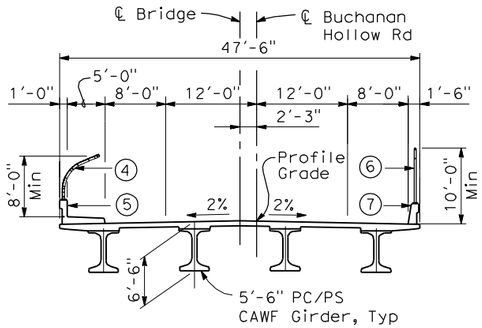
| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-6" |
| LENGTH | = | 528'-10" |
| WIDTH | = | 47'-6" |
| AREA | = | 25,120 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |



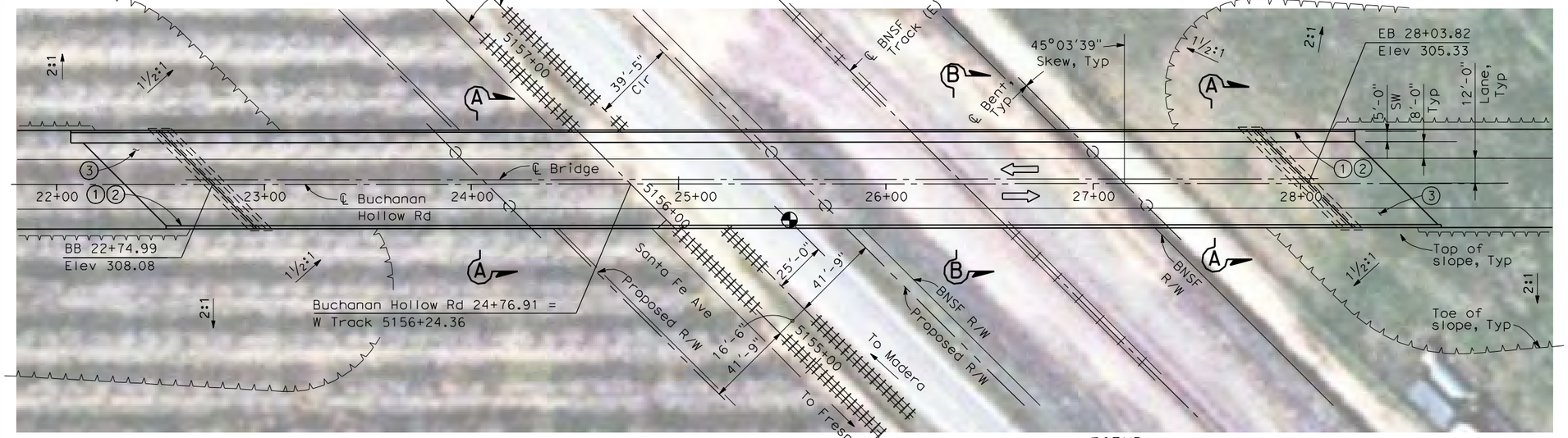

## ELEVATION
1" = 30'-0"




## SECTION A-A
1"=10'-0"




## SECTION B-B
1"=10'-0"




## PLAN
1" = 30'-0"

### NOTES:
1. Paint "Bridge No. XX-XX"
2. Paint "Buchanan Hollow Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Buchanan Hollow Road and BNSF track to be determined.
9. Existing underground and overhead utilities to be determined.

LEGEND:
- Direction of traffic
- Point of minimum vertical clearance

**LOCATION 17**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

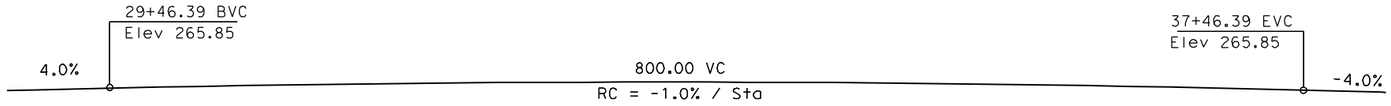
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

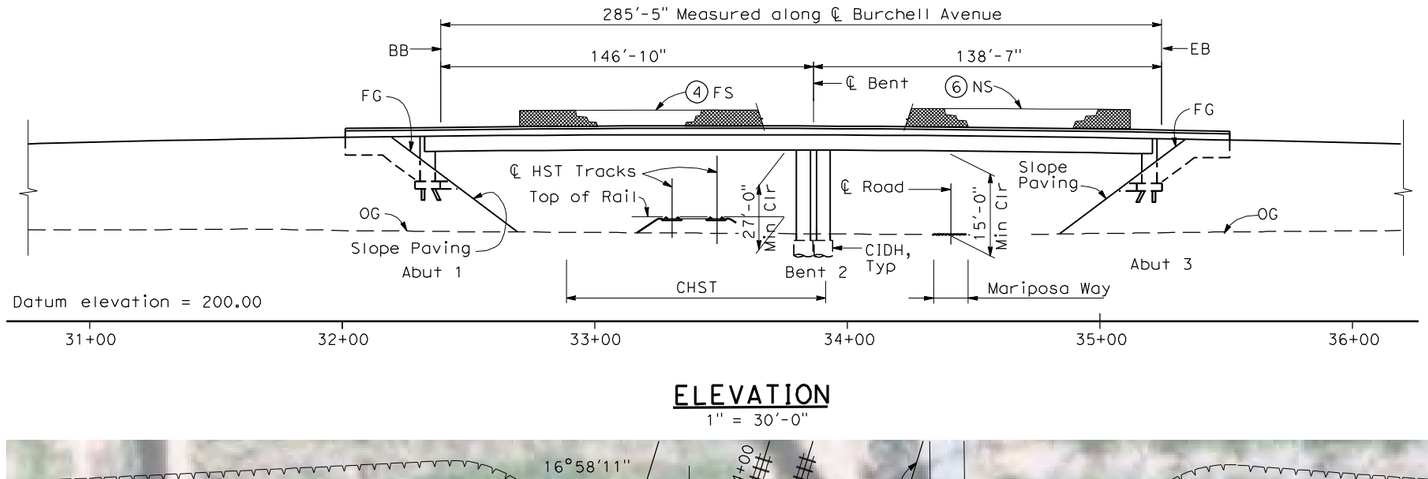
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO
BNSF MERCED CONNECTION
AVENUE 21
BUCHANAN HOLLOW ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1017
SCALE AS SHOWN
SHEET NO. OF

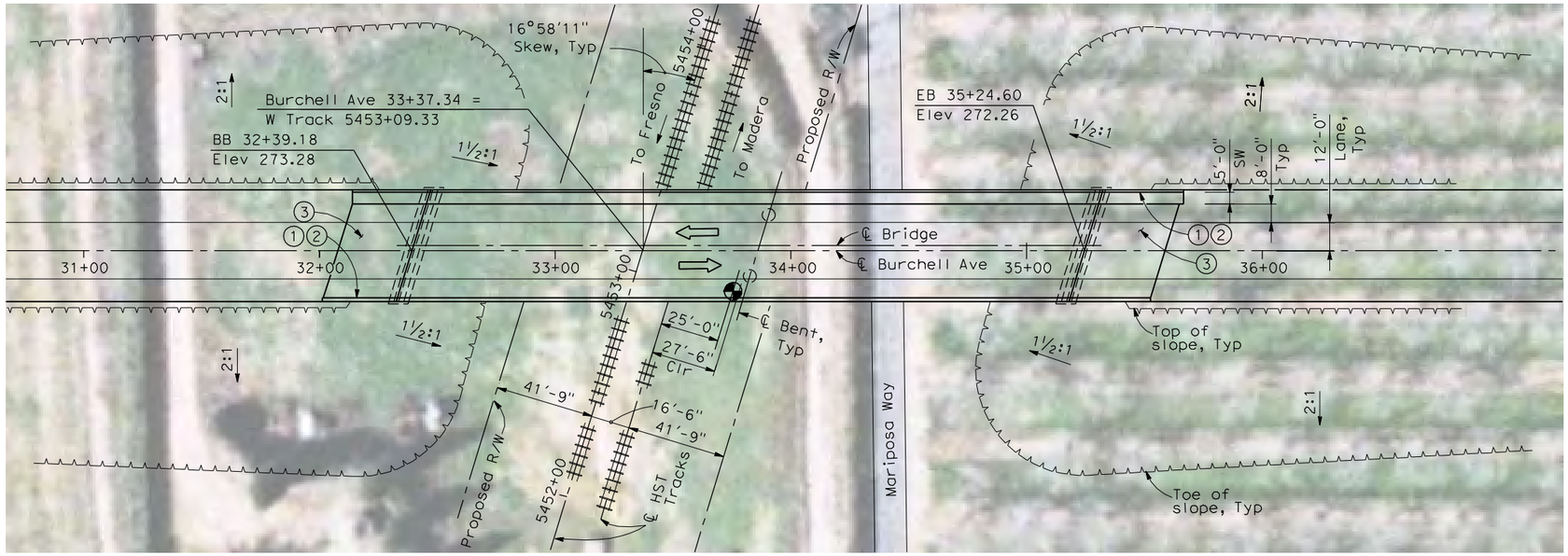
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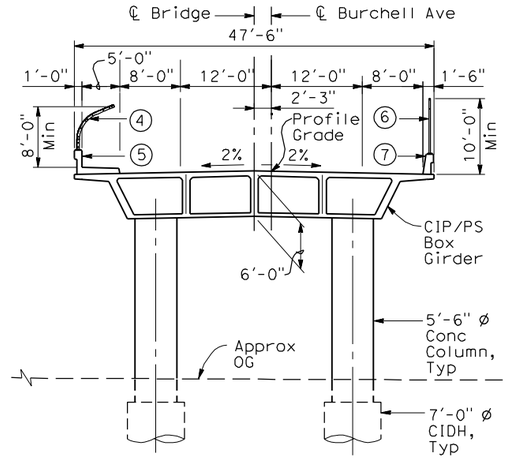

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Burchell Avenue OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Burchell Avenue to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 285'-5" |
| WIDTH | = | 47'-6" |
| AREA | = | 13,560 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 18**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

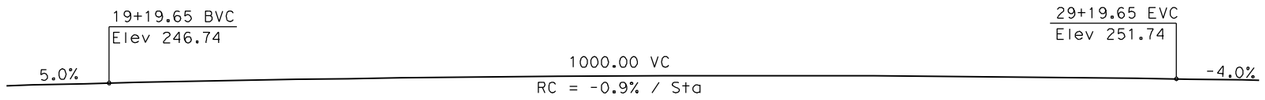
AECOM Technical Services, Inc.
2020 L Street, Suite 300 Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

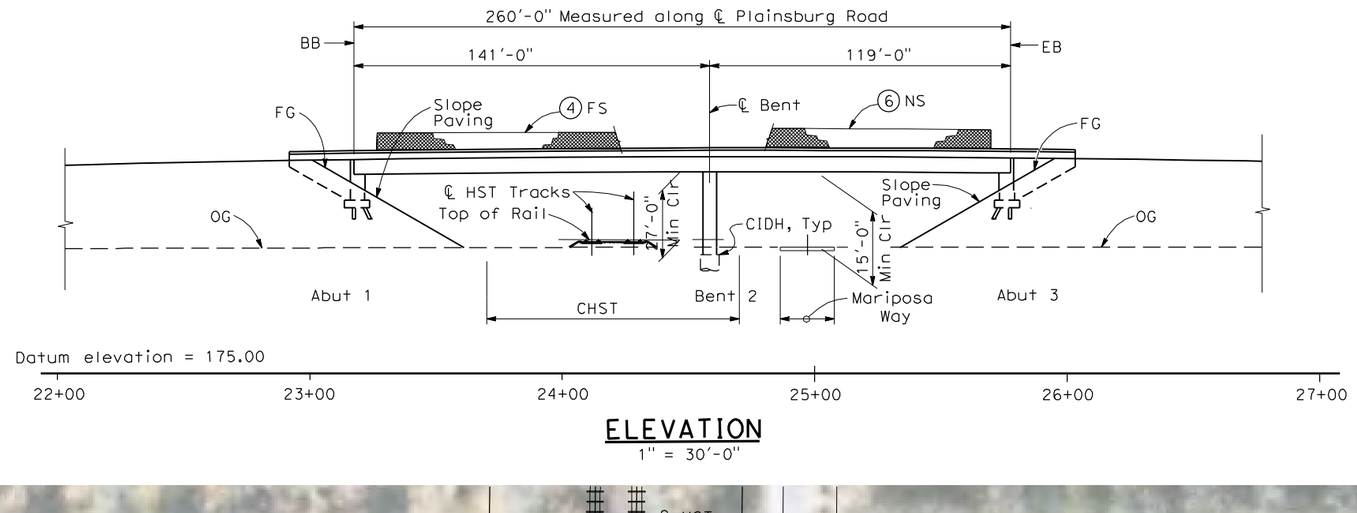
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION
AVENUE 21/AVENUE 24
BURCHELL AVENUE OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1018
SCALE AS SHOWN
SHEET NO. OF

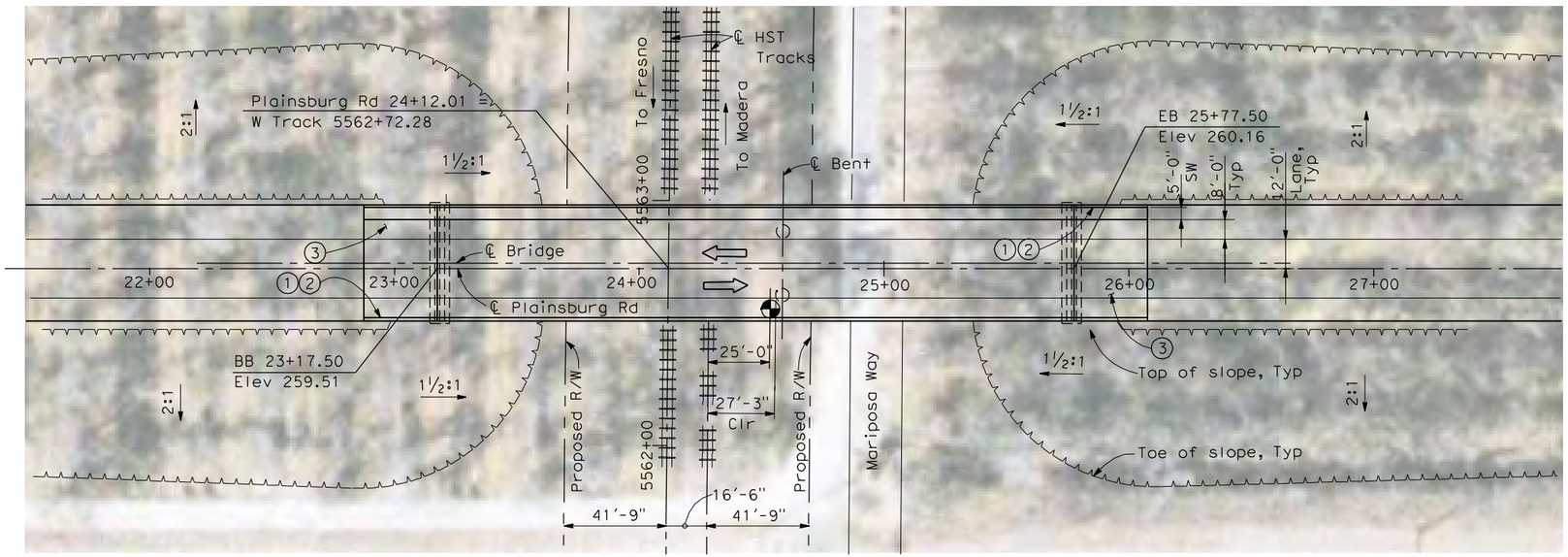
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cisnerose



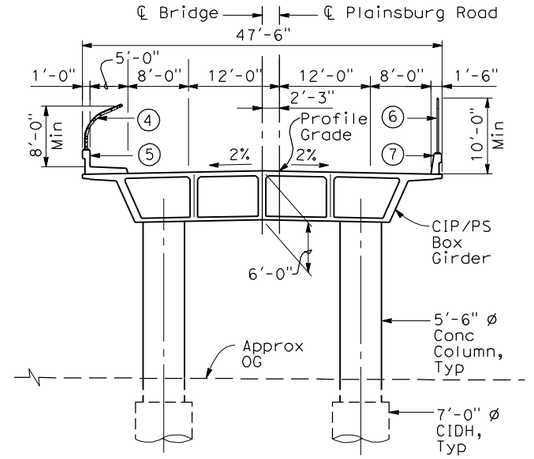

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Plainsburg Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Plainsburg Road to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⟸ Direction of traffic

Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 260'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 12,350 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 19**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

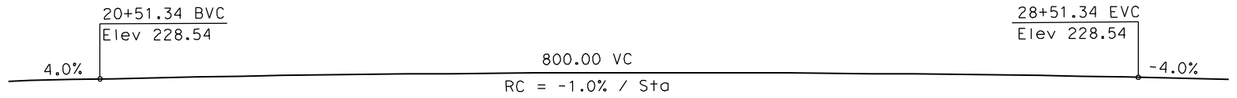
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

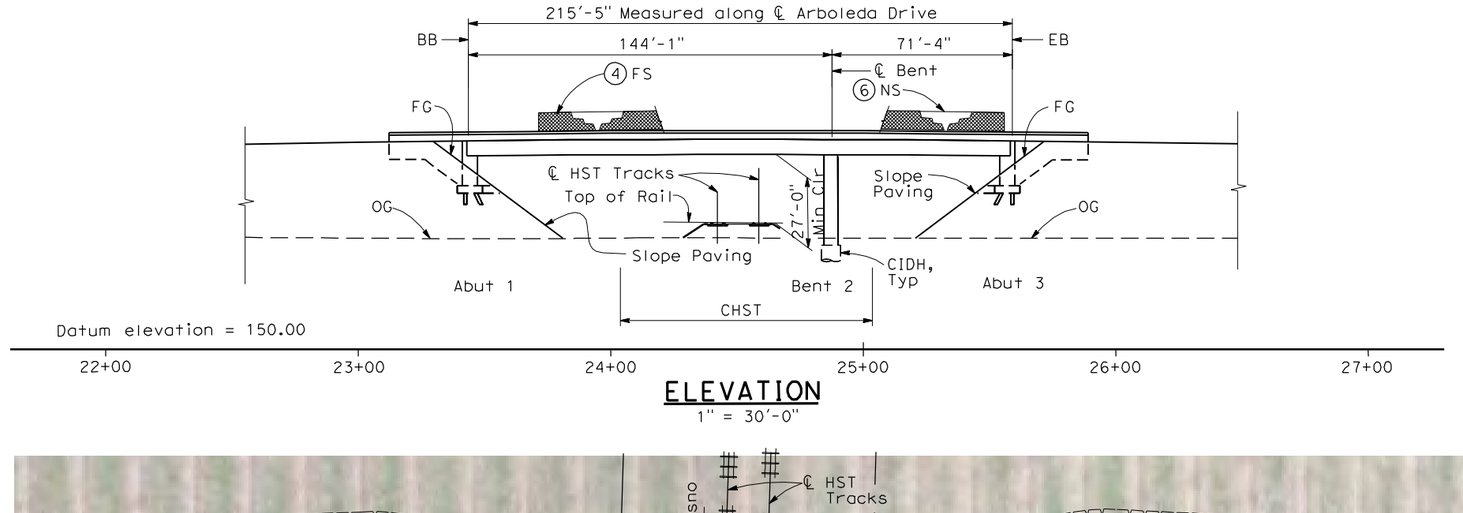
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MERCED CONNECTION
AVENUE 21/AVENUE 24
PLAINSBURG ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1019
SCALE AS SHOWN
SHEET NO. OF

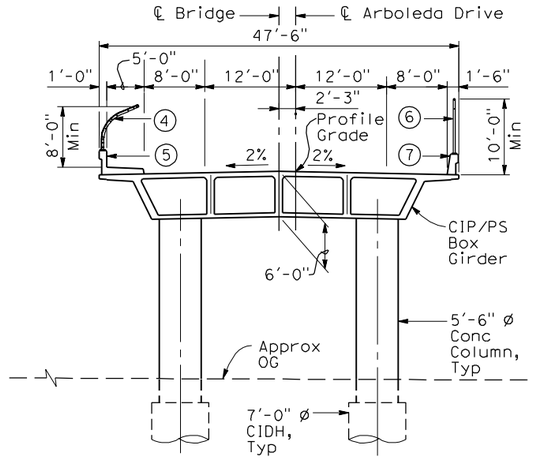
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cisnerose



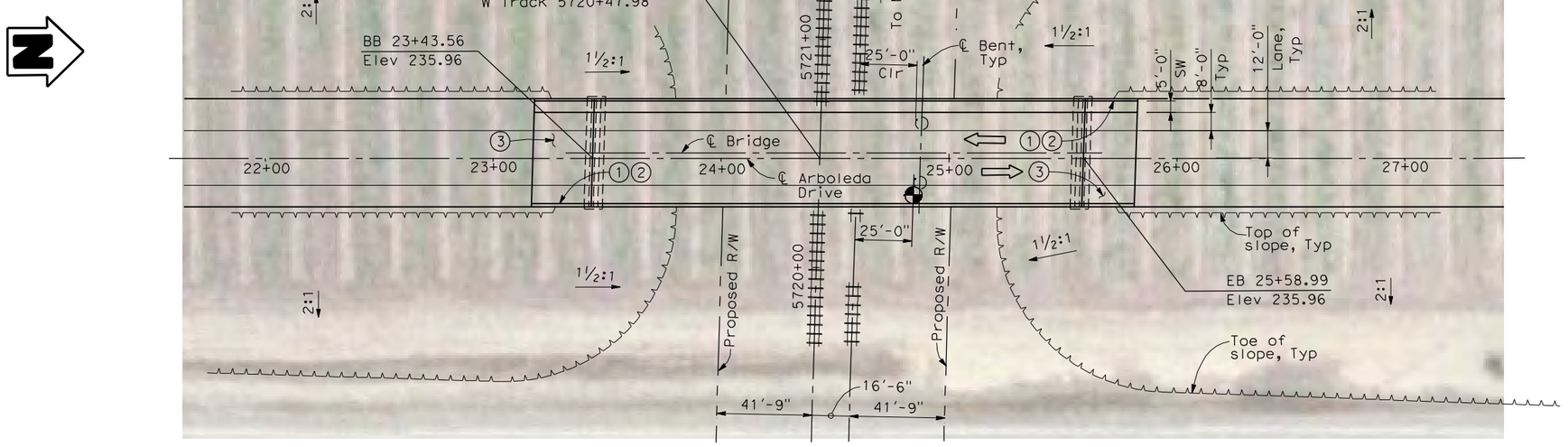

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"




## PLAN
1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Arboleda Drive OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Arboleda Drive to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 215'-5" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,230 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 20**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

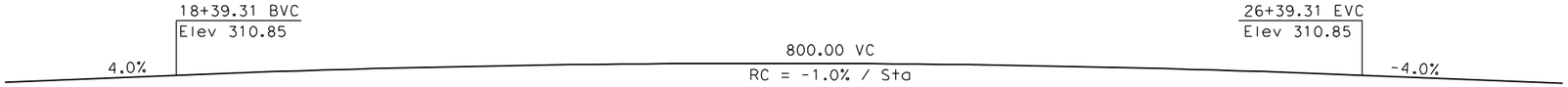
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

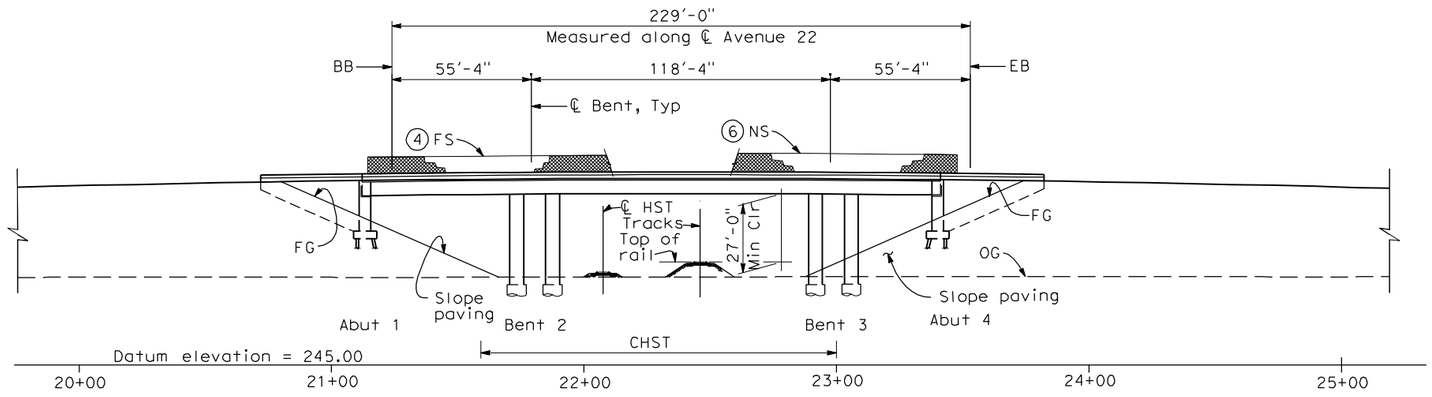
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION
AVENUE 21
ARBOLEDA DRIVE OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1020
SCALE AS SHOWN
SHEET NO. OF

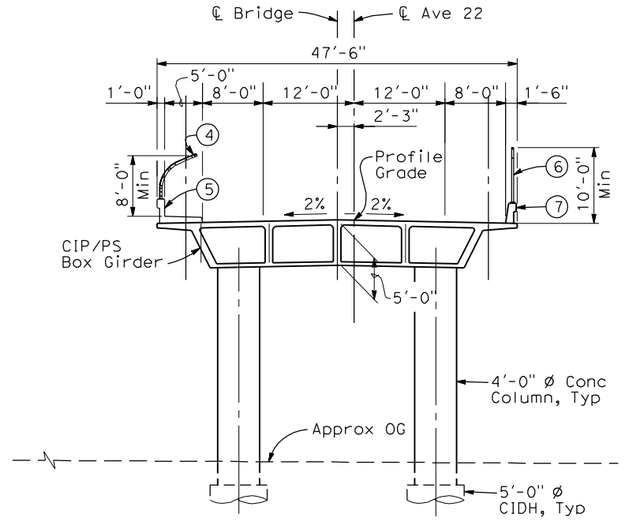
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## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"

NOTES:

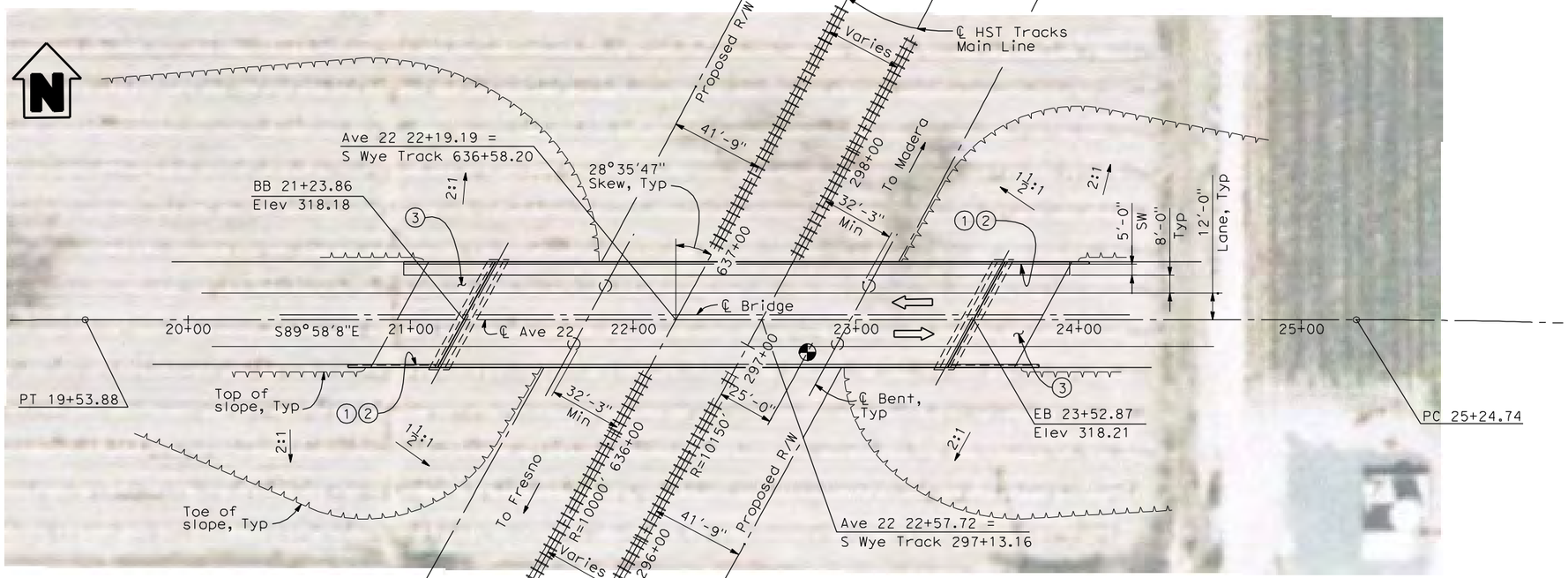
1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 22 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

LEGEND:

⇦ Direction of traffic

◒ Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 5'-0" |
| LENGTH | = | 229'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,880 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |




## PLAN
1" = 30'-0"

**LOCATION 21**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY K. LEE
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

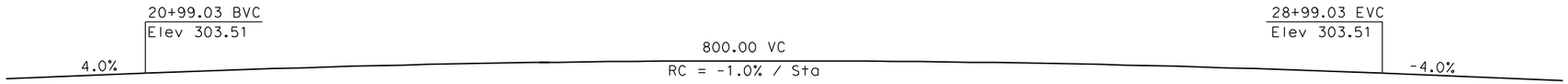
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

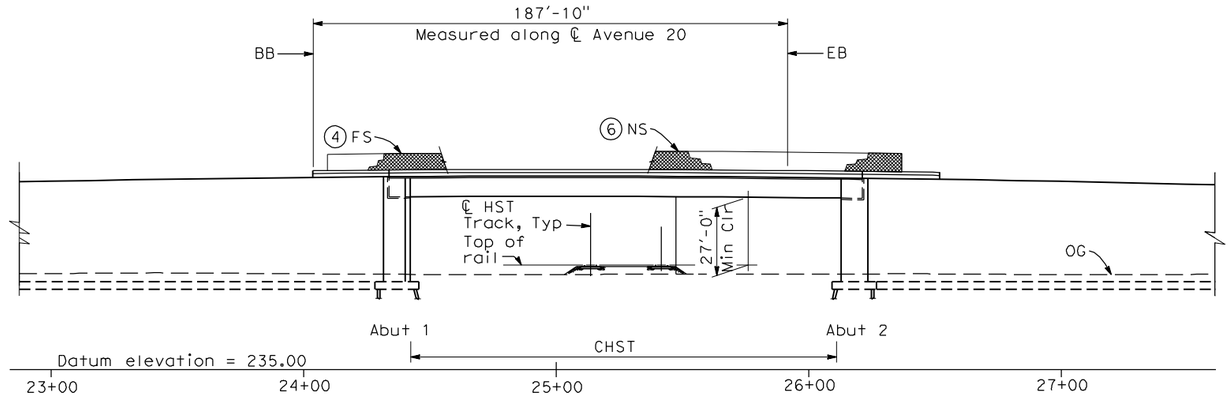
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF WYE CONNECTION
AVENUE 21
AVENUE 22 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1021
SCALE As shown
SHEET NO. OF

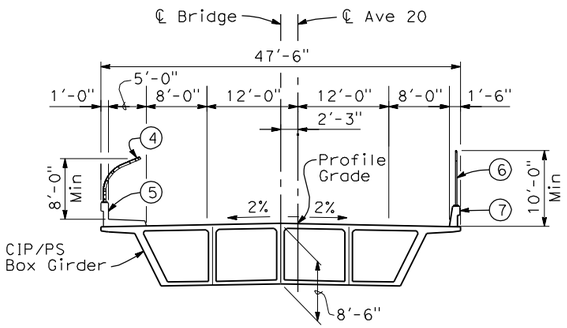
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cisnerose



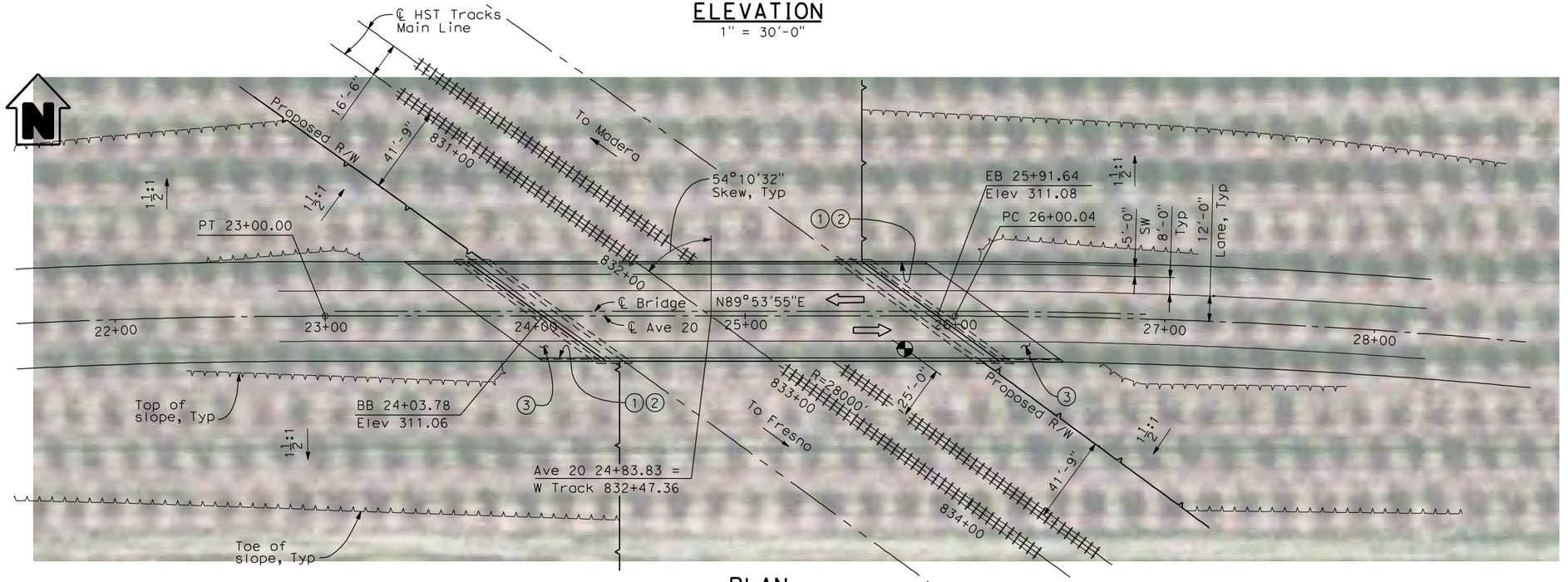

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"




## PLAN
1" = 30'-0"

### NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 20 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

### LEGEND:

- Direction of traffic
- Point of minimum vertical clearance
- Retaining Wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 8'-6" |
| LENGTH | = | 187'-10" |
| WIDTH | = | 47'-6" |
| AREA | = | 8,920 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 22**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY K. LEE
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

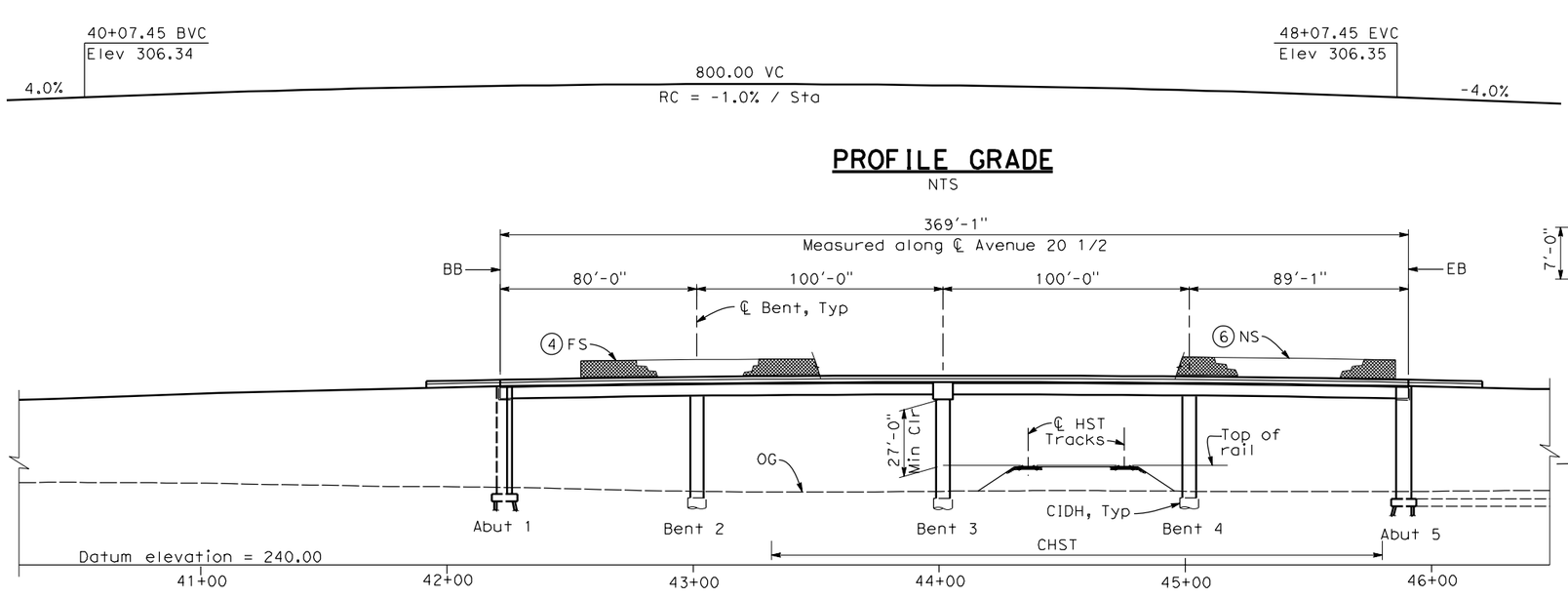
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 20 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1022
SCALE As shown
SHEET NO. OF

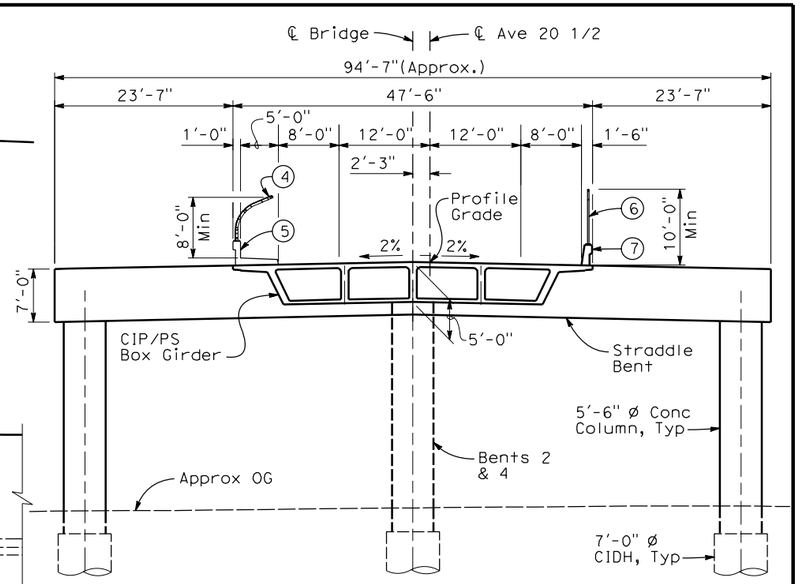
cisnerose 4/30/2011 3:21:48 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\A1-21WYE\W-MF-ST-OH_Ave 20.dgn



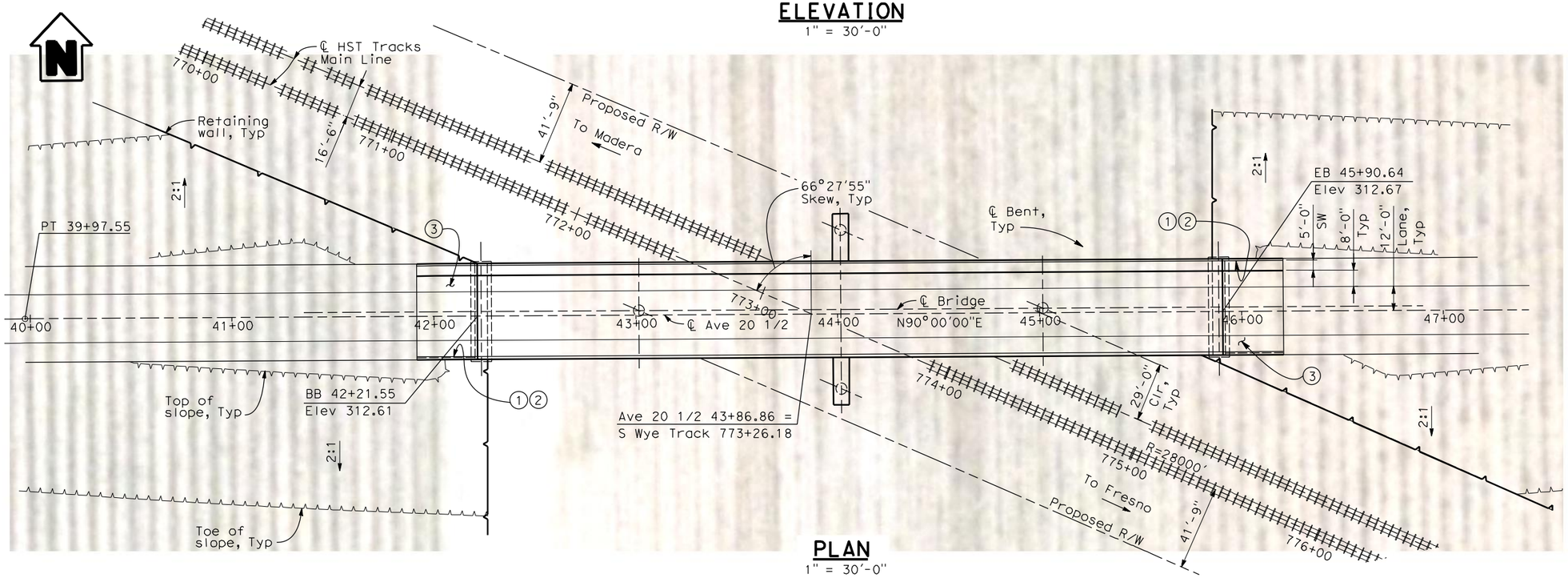

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"




## PLAN
1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 20 1/2 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining Wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 5'-0" |
| LENGTH | = | 369'-1" |
| WIDTH | = | 47'-6" |
| AREA | = | 16,410 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 23**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 04/11/12 | HL | EC | AB | |

DESIGNED BY: H. LEE
DRAWN BY: E. CISNEROS
CHECKED BY: K. LEE
IN CHARGE: A. BOONE
DATE: 04/11/2012

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

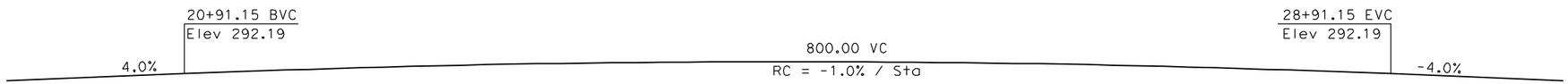
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

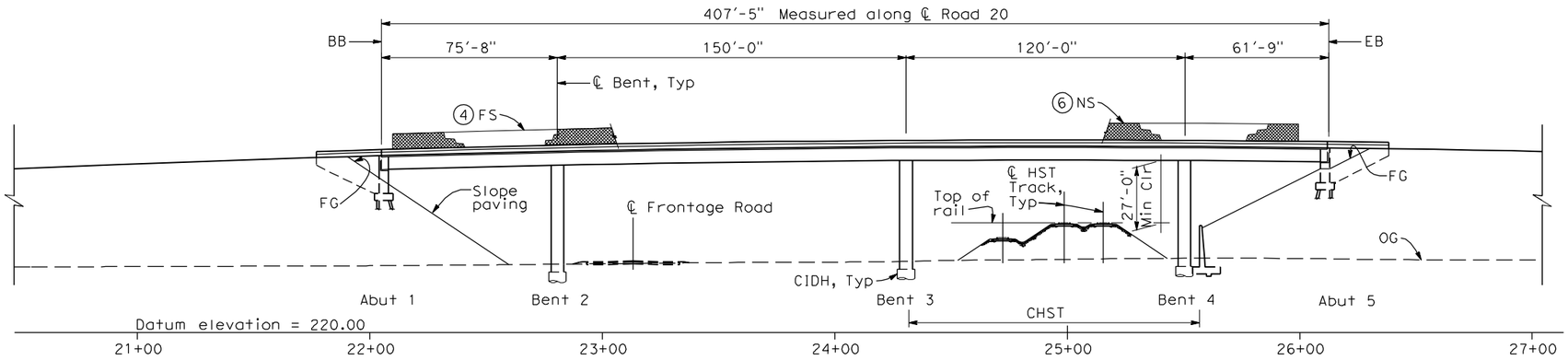
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 20 1/2 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1023
SCALE As shown
SHEET NO. OF

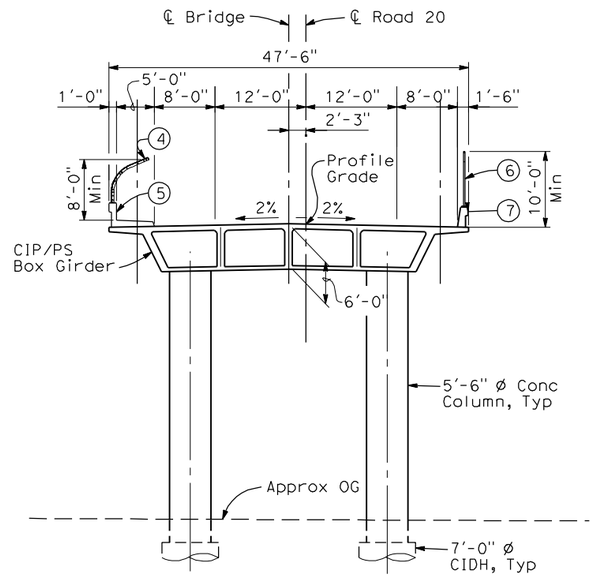
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cisnerose



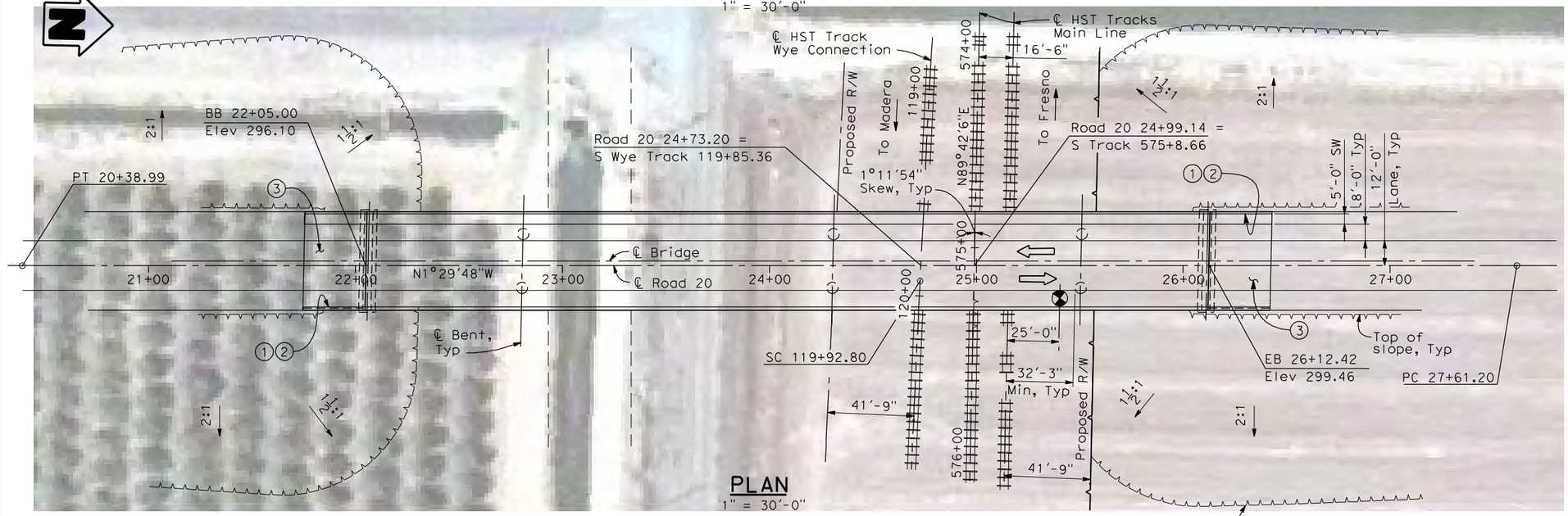

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"




## PLAN
1" = 30'-0"

NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Road 20 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

LEGEND:

- Direction of traffic
- Point of minimum vertical clearance
- Retaining Wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 407'-5" |
| WIDTH | = | 47'-6" |
| AREA | = | 19,350 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 25**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY K. LEE
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

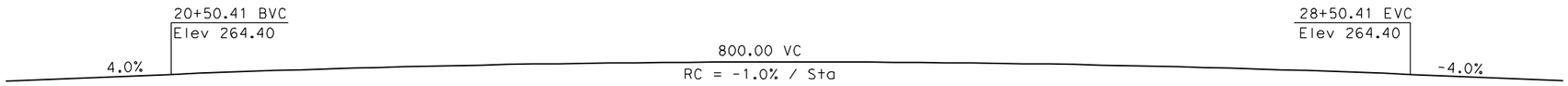
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

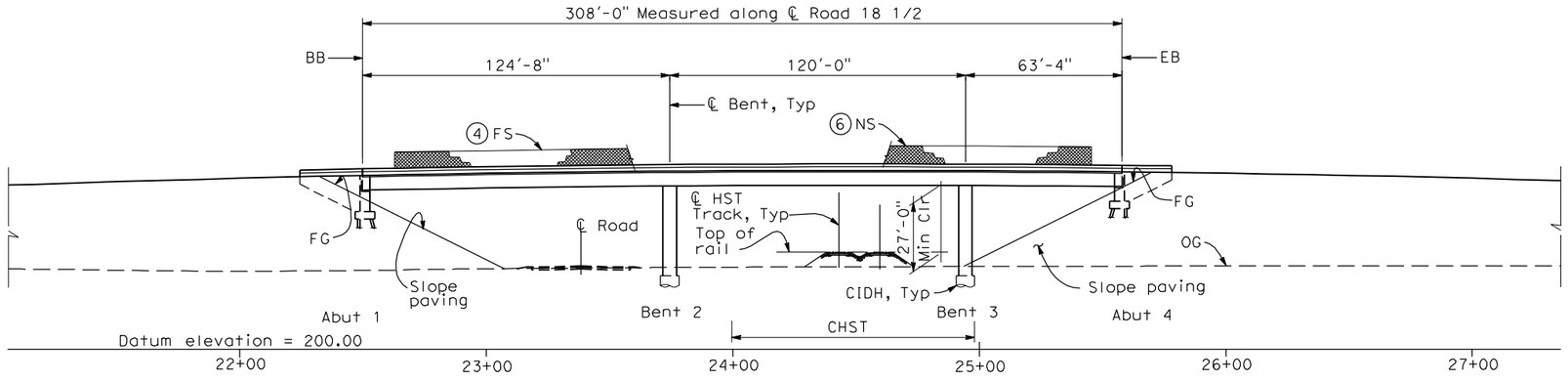
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO
BNSF MAIN LINE
AVENUE 21
ROAD 20 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1026
SCALE As shown
SHEET NO. OF

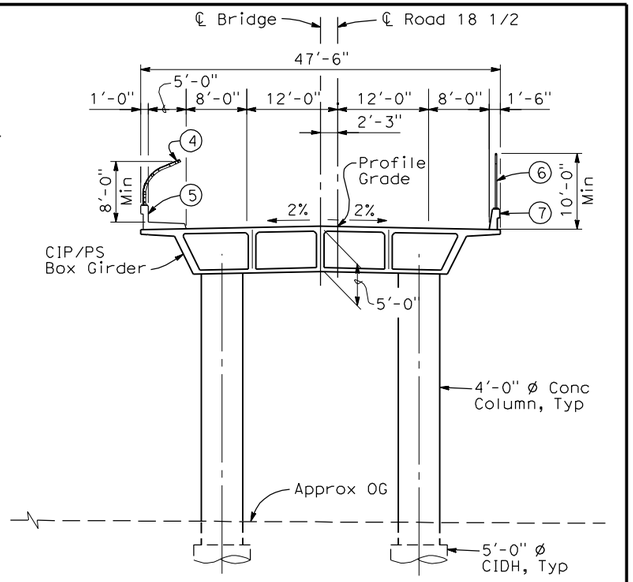
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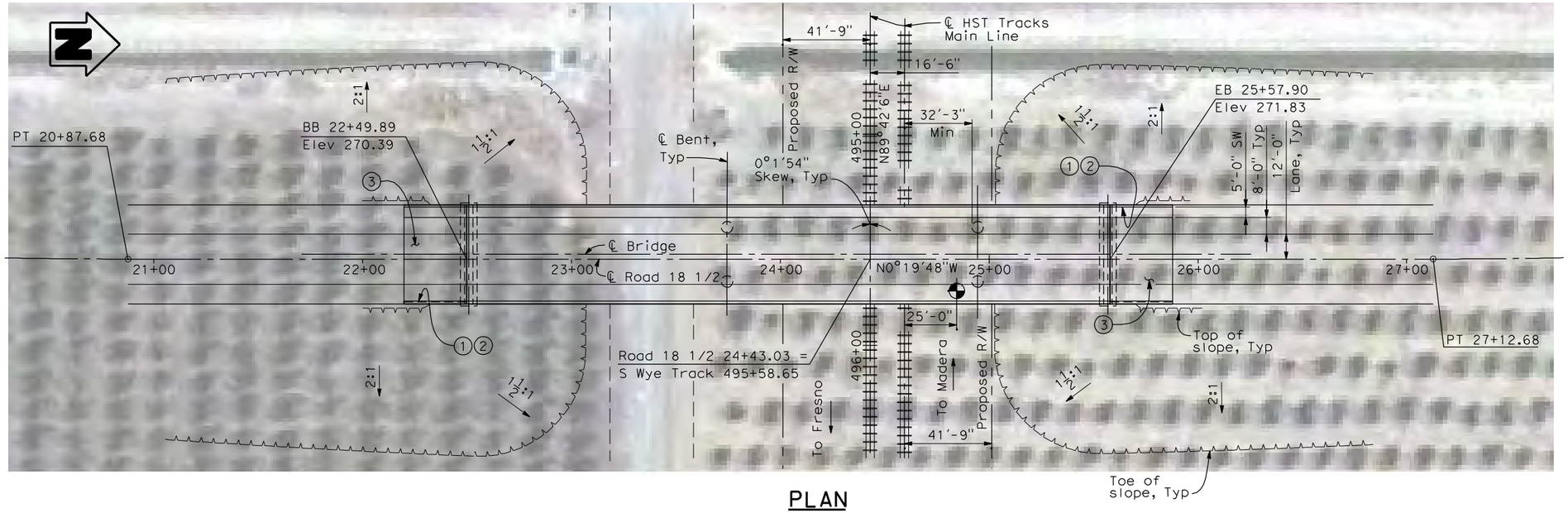

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"




## PLAN
1" = 30'-0"

NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Road 18 1/2 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

LEGEND:

- Direction of traffic
- Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 5'-0" |
| LENGTH | = | 308'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 14,630 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 26**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY K. LEE
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

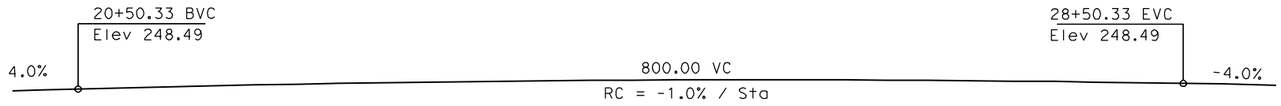
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

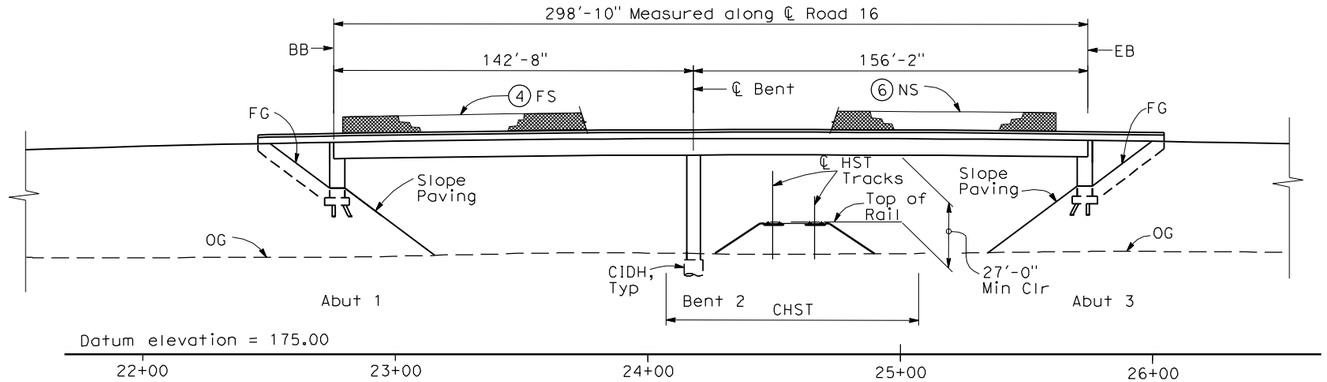
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
ROAD 18 1/2 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1027
SCALE As shown
SHEET NO. OF

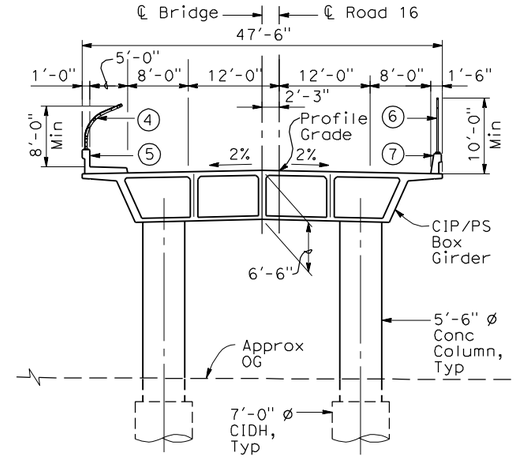
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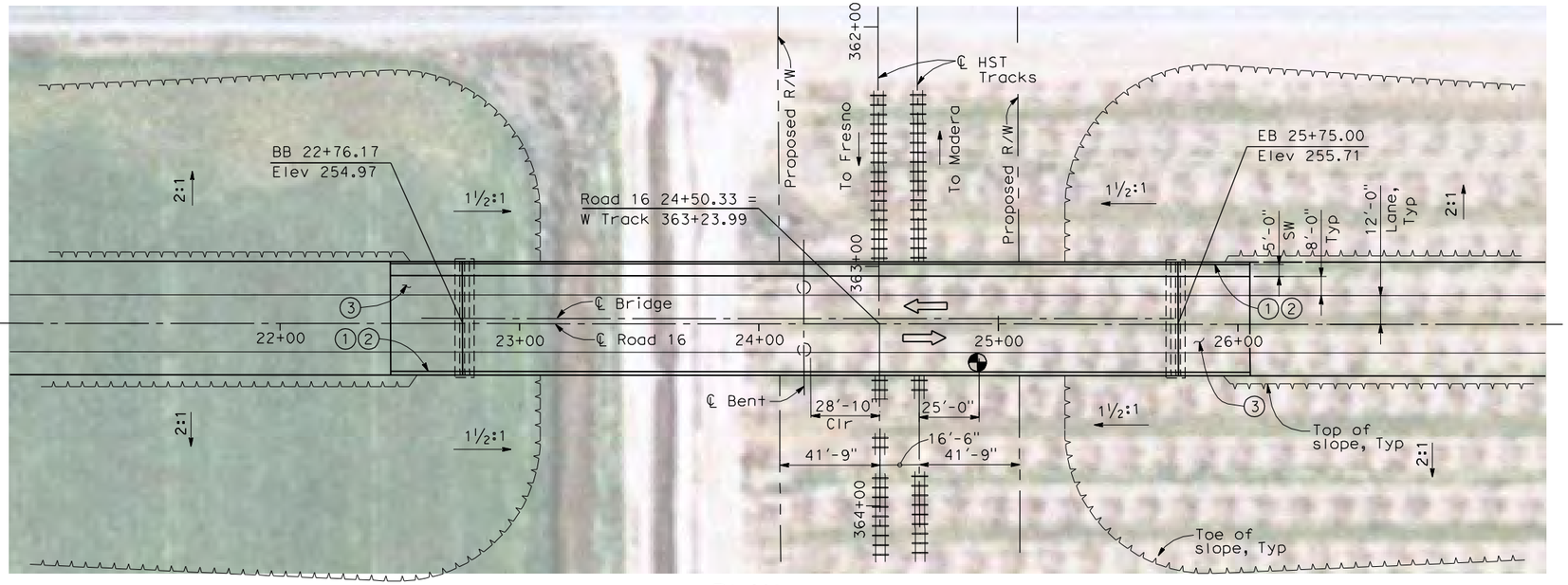

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"




## PLAN
1" = 30'-0"

NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Road 16 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Road 16 to be determined.
9. Existing underground and overhead utilities to be determined.

LEGEND:

⇦ Direction of traffic

Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-6" |
| LENGTH | = | 298'-10" |
| WIDTH | = | 47'-6" |
| AREA | = | 14,190 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 27**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

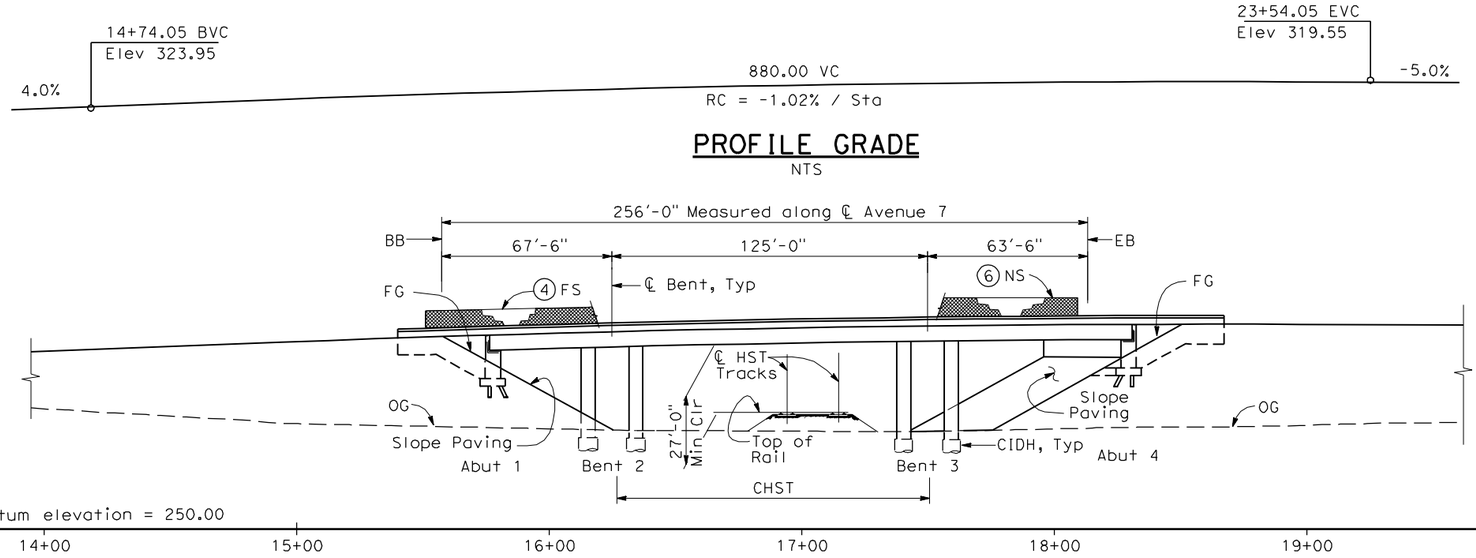
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MAIN LINE
AVENUE 21
ROAD 16 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1028
SCALE AS SHOWN
SHEET NO. OF

cisnerose 4/30/2011 4:19:46 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\From Oakland\VM-MF-ST1028.dgn

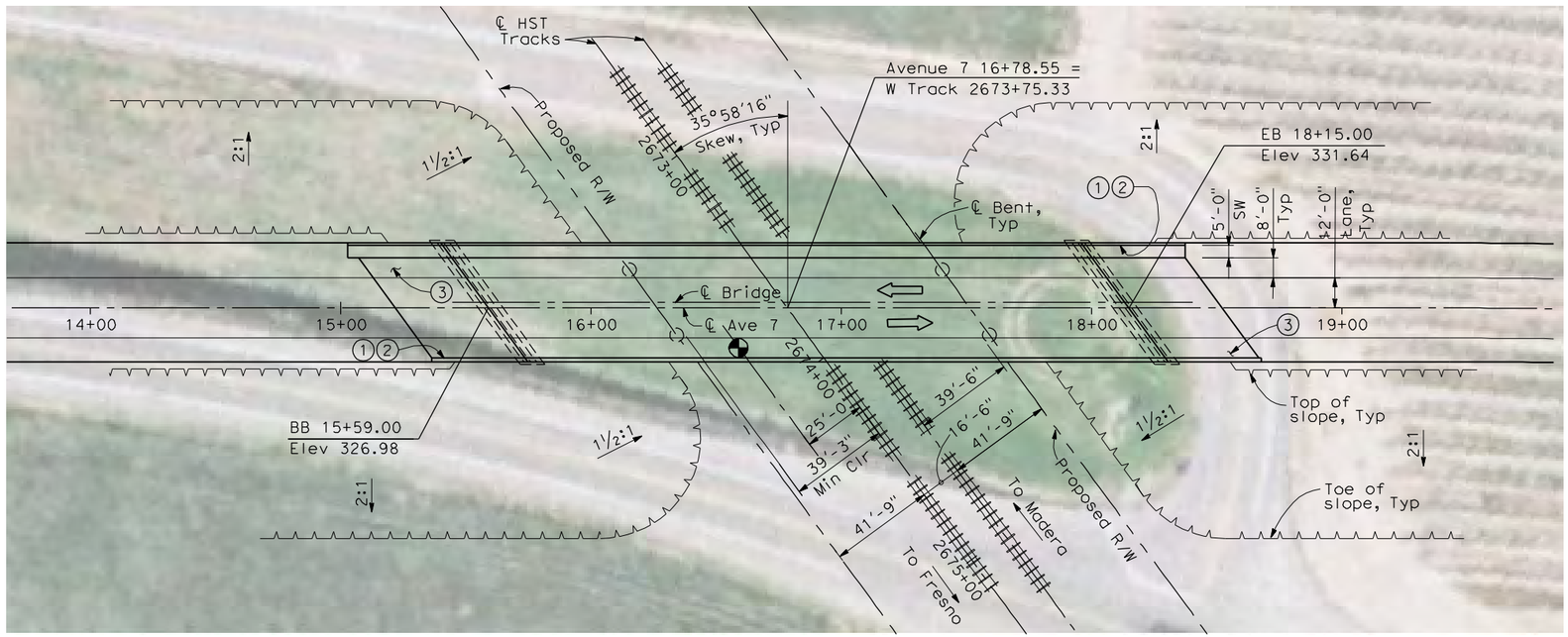



## PROFILE GRADE

NTS

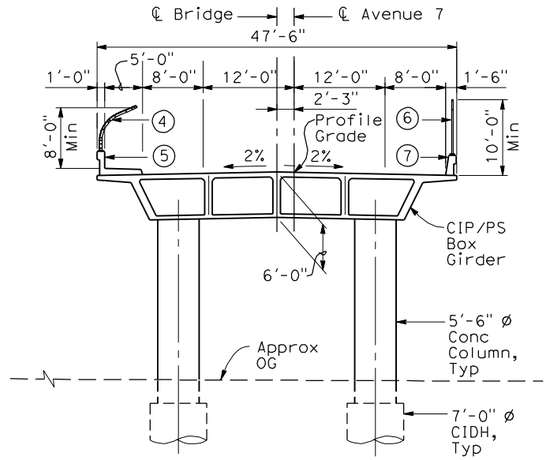
## ELEVATION

1" = 30'-0"




## PLAN

1" = 30'-0"




## TYPICAL SECTION

1"=10'-0"

NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 7 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 7 to be determined.
9. Existing underground and overhead utilities to be determined.

LEGEND:

- Direction of traffic
- Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 256'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 12,160 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 65**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**
**NOT FOR CONSTRUCTION**

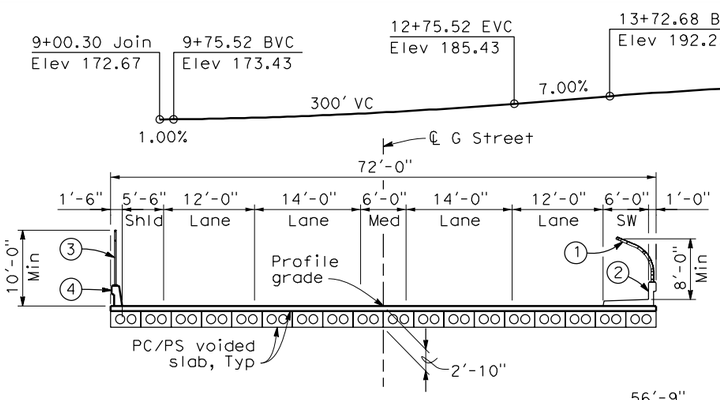
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 7 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1070
SCALE AS SHOWN
SHEET NO. OF

cisnerose 4/30/2011 4:29:54 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\From Oakland\W-MF-ST1070.dgn




## SECTION B-B
1"=10'-0"



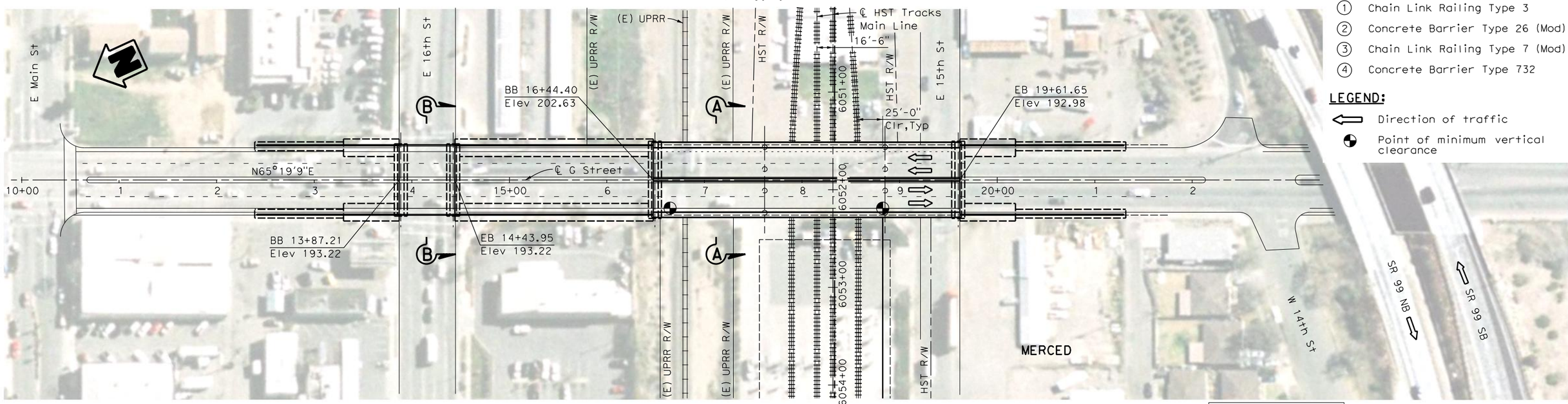

## PROFILE GRADE
No Scale




## SECTION A-A
1"=10'-0"




## ELEVATION
1" = 50'-0"




## PLAN
1" = 50'-0"

**NOTES:**

1. Chain Link Railing Type 3
2. Concrete Barrier Type 26 (Mod)
3. Chain Link Railing Type 7 (Mod)
4. Concrete Barrier Type 732

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance

**LOCATION 64**

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 01/13/12 | HL | JR | AB | |

DESIGNED BY H. LEE
DRAWN BY E. CISNEROS
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 01/13/2012

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

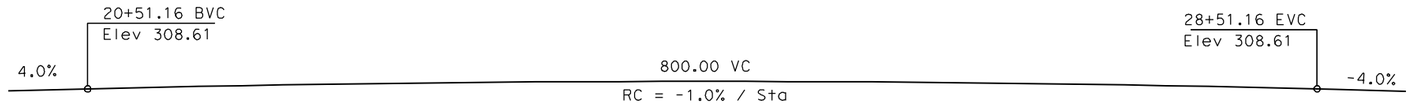
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

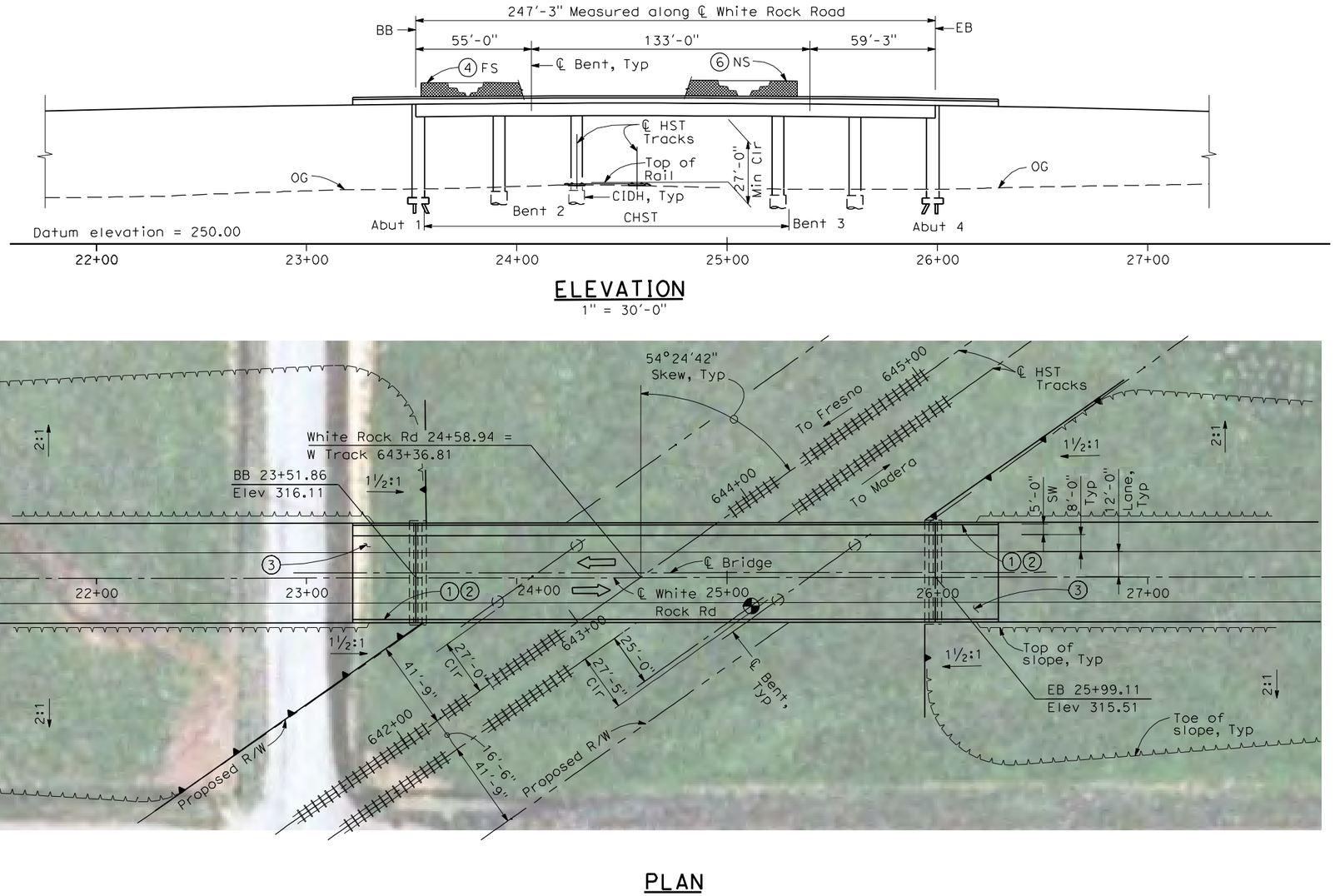
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
UPRR/SR 99 MERCED CONNECTION
AVENUE 21
G STREET OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1180
SCALE As shown
SHEET NO. OF

3/30/2012 2:58:46 PM \\usscr1fp001\Cadd\CHSR\60022962\Task-03_Merced-Fresno\cadd\Struct\Sheet\15%_Grade Structures_Revisions\W-WF-ST-OH_G Street-Loc64.dgn
cisnerose



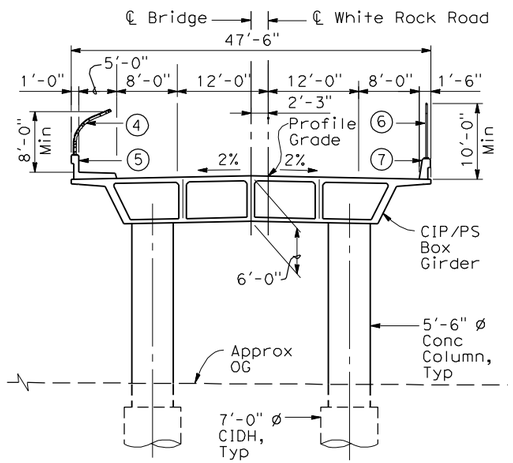

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "White Rock Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of White Rock Road to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 247'-3" |
| WIDTH | = | 47'-6" |
| AREA | = | 11,740 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 70**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

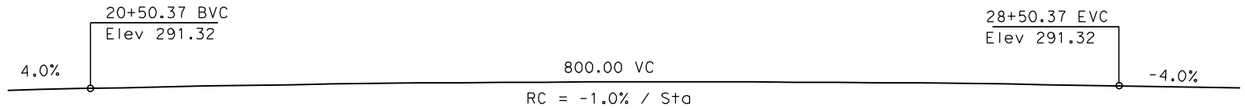
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

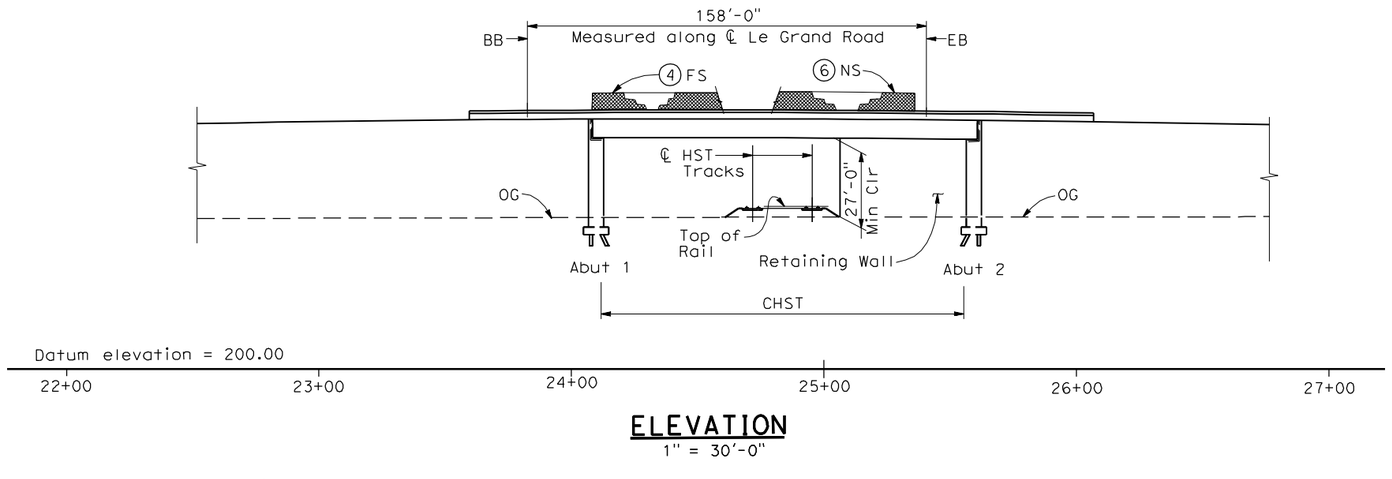
BNSF MERCED CONNECTION (ALTERNATIVE 1)
AVENUE 21/AVENUE 24
WHITE ROCK ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1050
SCALE AS SHOWN
SHEET NO. OF

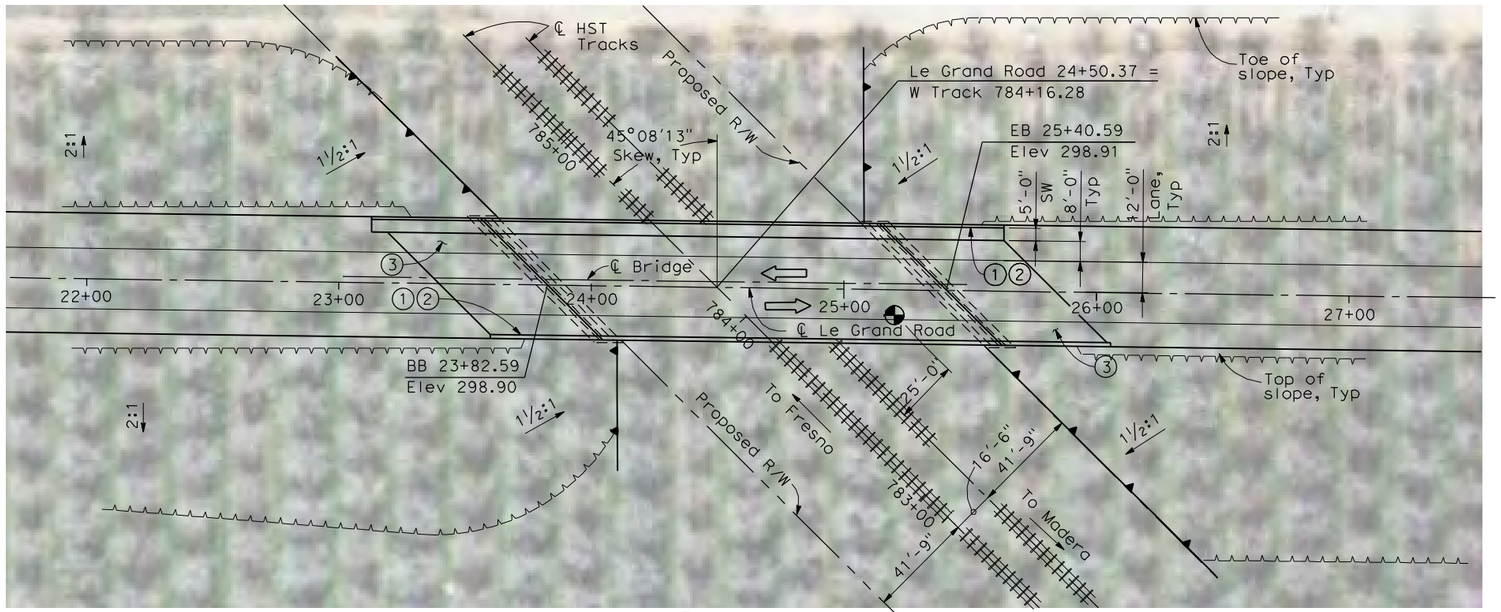
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cisnerose



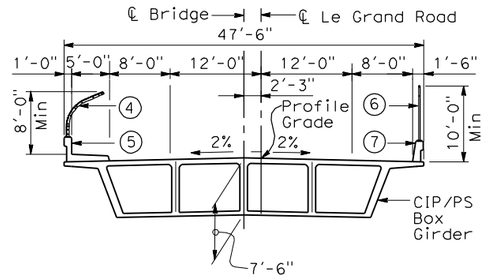

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Le Grand Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Le Grand Road to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining Wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | = | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 7'-6" |
| LENGTH | = | 158'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 7,510 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 71**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

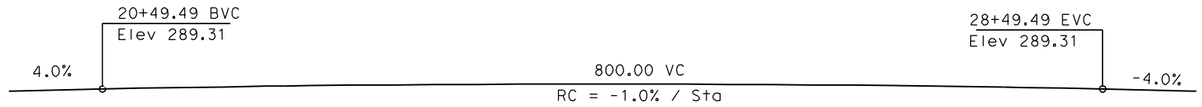
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

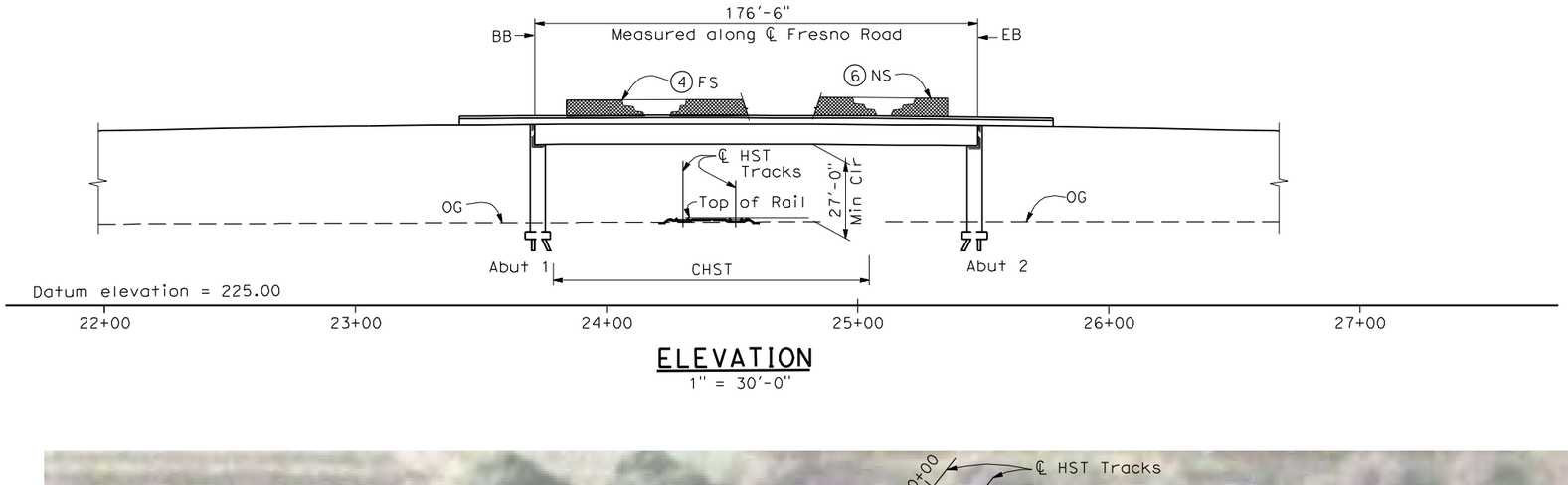
BNSF MERCED CONNECTION (ALTERNATIVE 1)
AVENUE 21/AVENUE 24
LE GRAND ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1051
SCALE AS SHOWN
SHEET NO. OF

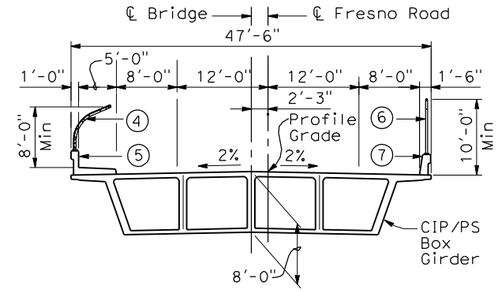
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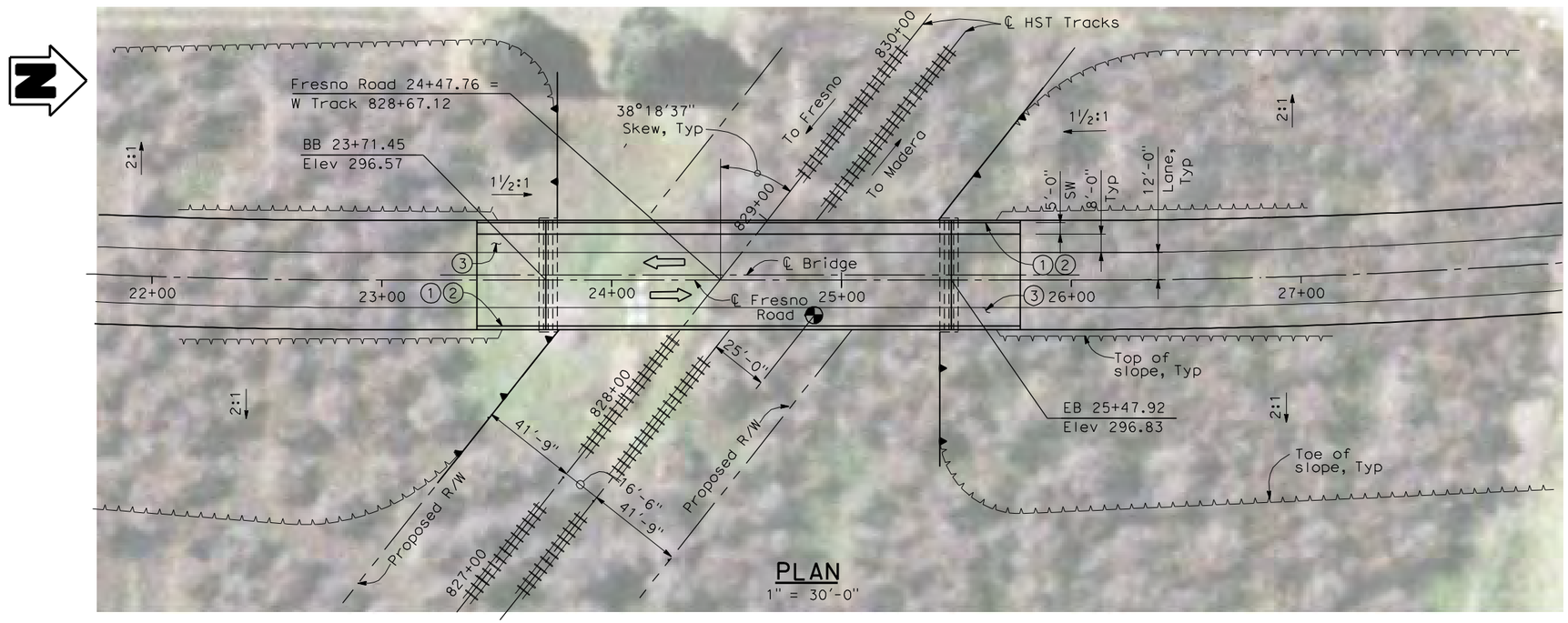

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"




## PLAN
1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Fresno Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Fresno Road to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 8'-0" |
| LENGTH | = | 176'-6" |
| WIDTH | = | 47'-6" |
| AREA | = | 8,380 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 72**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

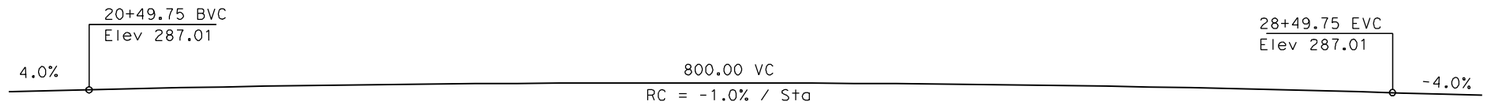
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

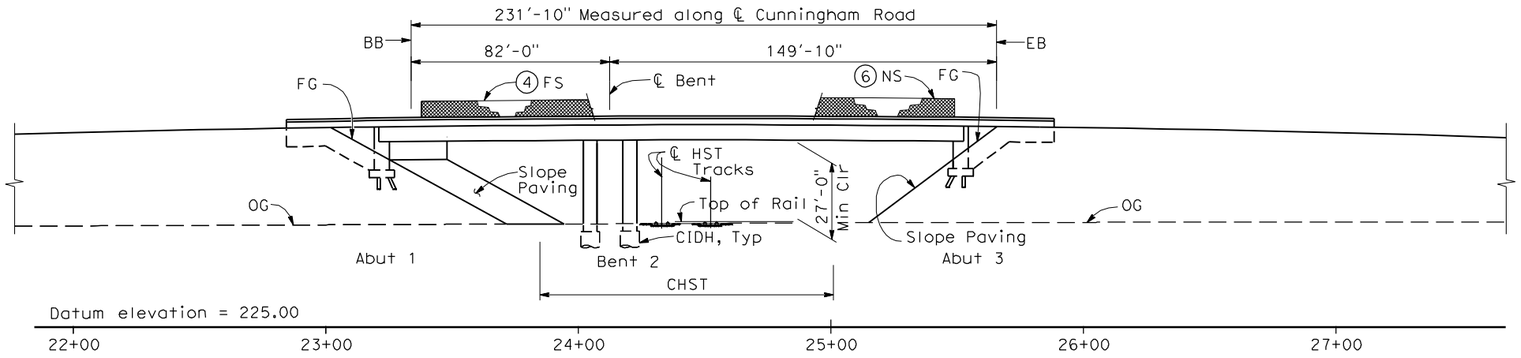
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MERCED CONNECTION (ALTERNATIVE 1)
AVENUE 21/AVENUE 24
FRESNO ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1052
SCALE AS SHOWN
SHEET NO. OF

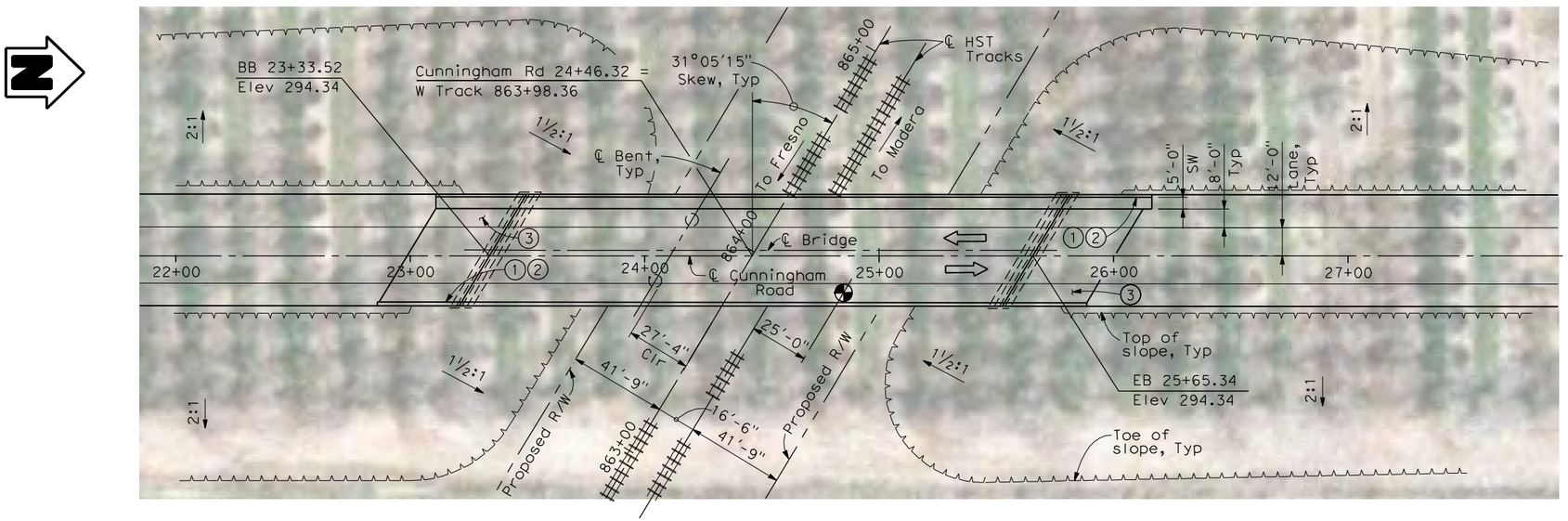
cisnerose 4/30/2011 4:21:33 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\From Oakland\W-MF-ST1052.dgn



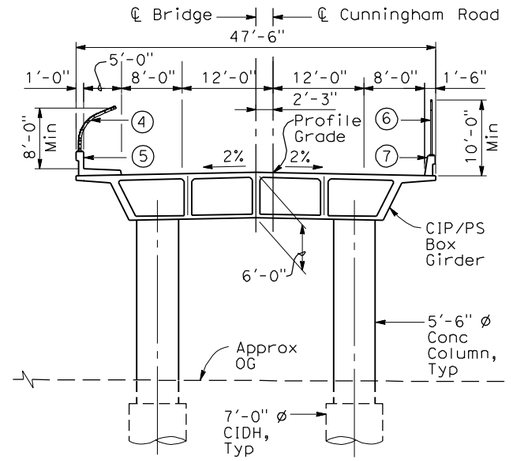

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Cunningham Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Cunningham Road to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 231'-10" |
| WIDTH | = | 47'-6" |
| AREA | = | 11,010 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 73**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

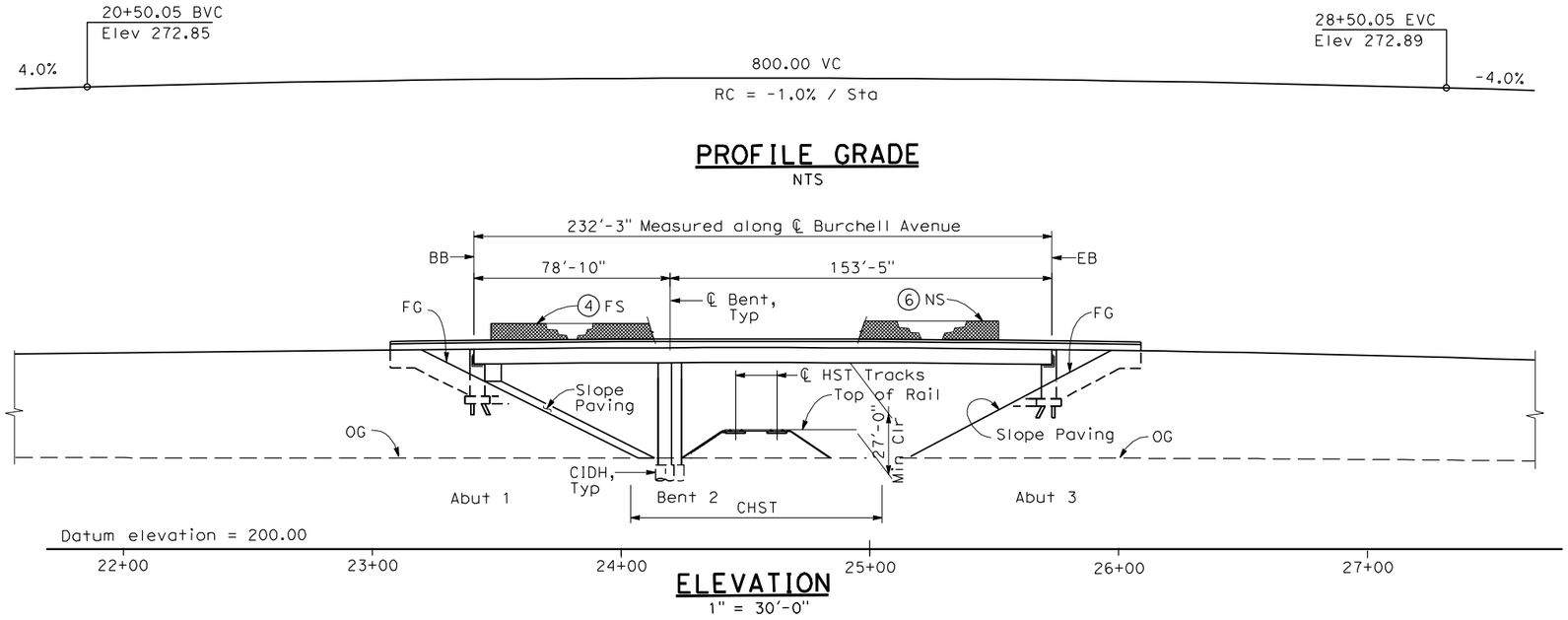
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION (ALTERNATIVE 1)
AVENUE 21/AVENUE 24
CUNNINGHAM ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1053
SCALE AS SHOWN
SHEET NO. OF

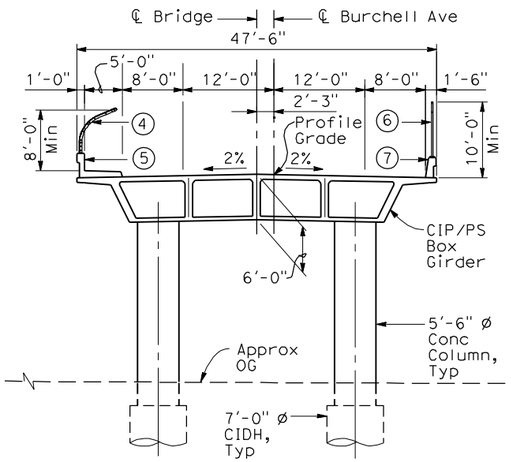
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4/30/2011 4:21:59 PM
cisnerose



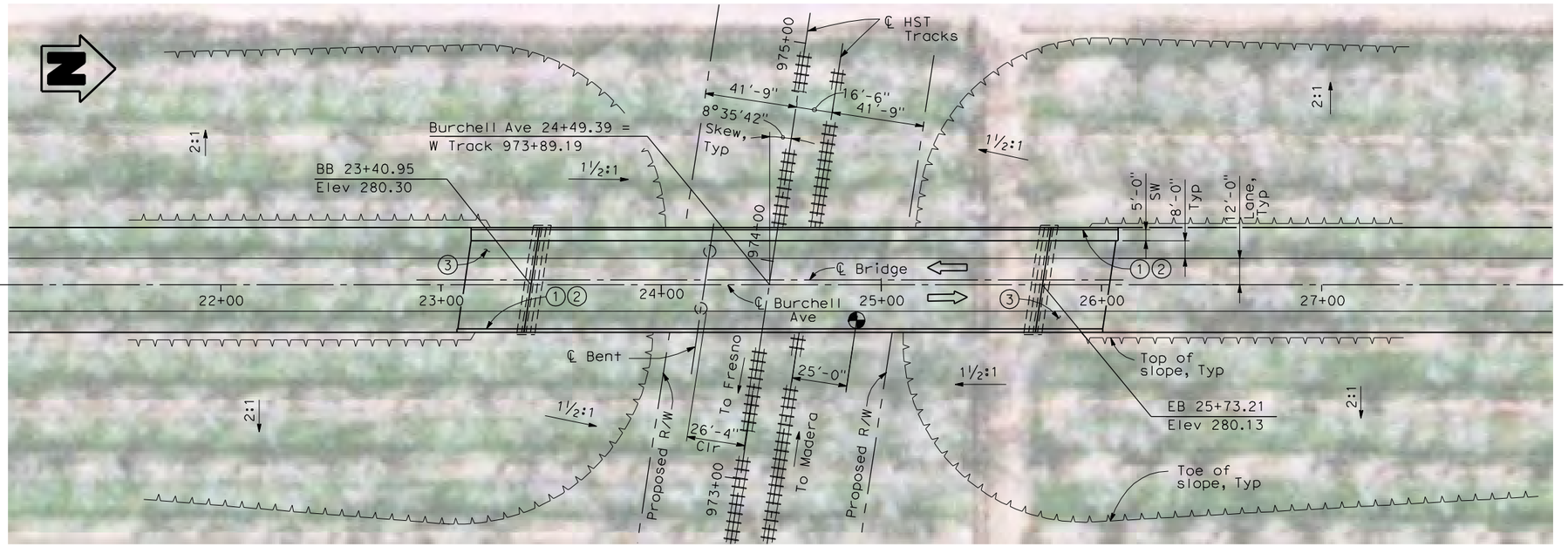

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"




## PLAN
1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Burchell Avenue OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Burchell Avenue to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

◒ Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 232'-3" |
| WIDTH | = | 47'-6" |
| AREA | = | 11,030 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 74**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

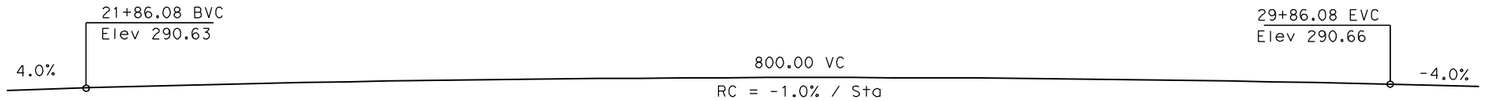
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

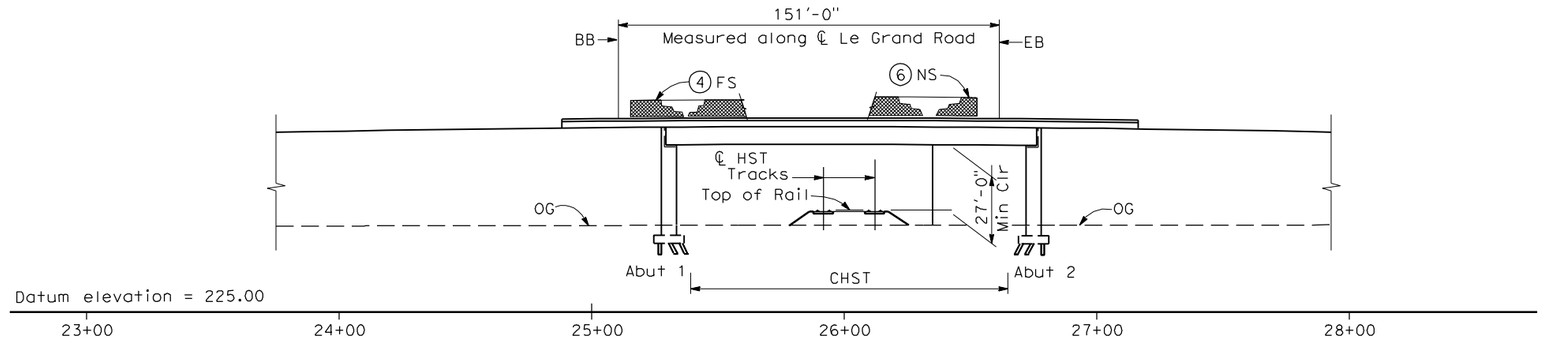
BNSF MERCED CONNECTION (ALTERNATIVE 1)
AVENUE 21/AVENUE 24
BURCHELL AVENUE OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1054
SCALE AS SHOWN
SHEET NO. OF

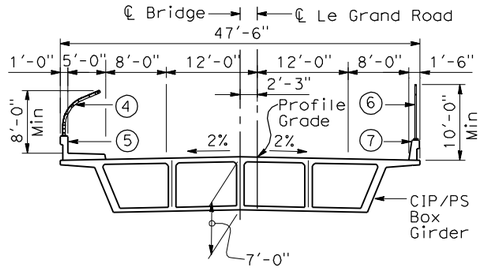
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## PROFILE GRADE
NTS



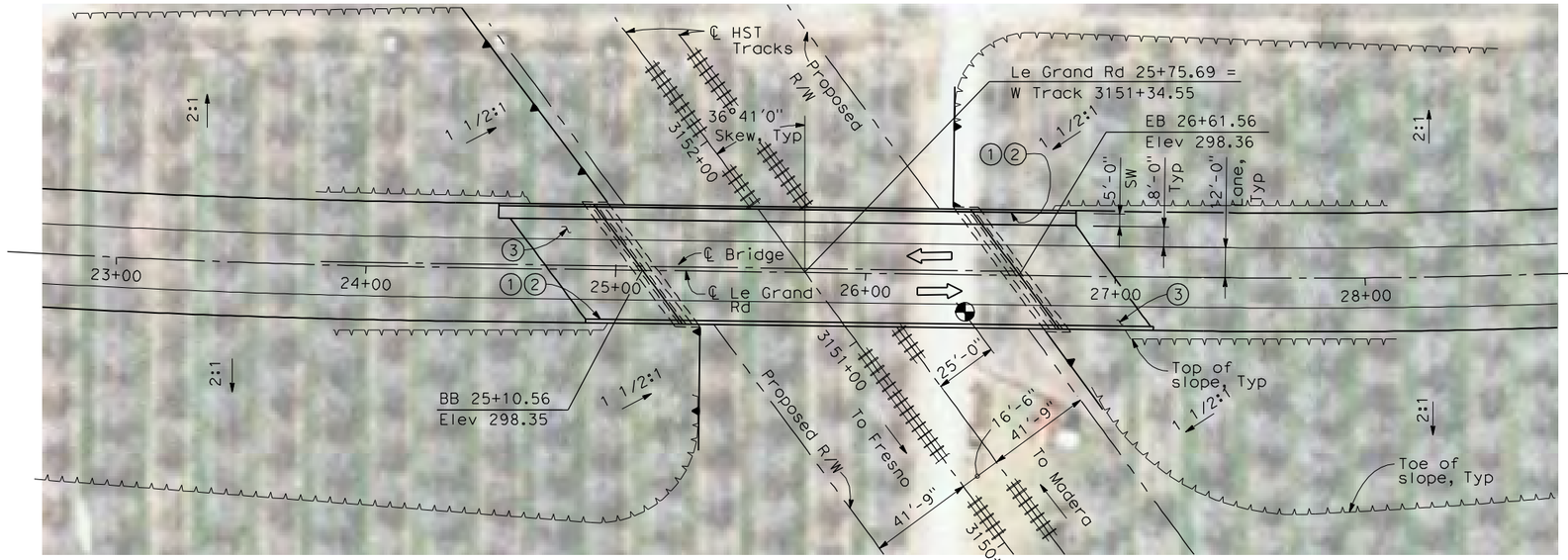

## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"

NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Le Grand Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Le Grand Road to be determined.
9. Existing underground and overhead utilities to be determined.




## PLAN
1" = 30'-0"

LEGEND:

- Direction of traffic
- Point of minimum vertical clearance
- Retaining Wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 7'-0" |
| LENGTH | = | 151'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 7,170 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 75**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

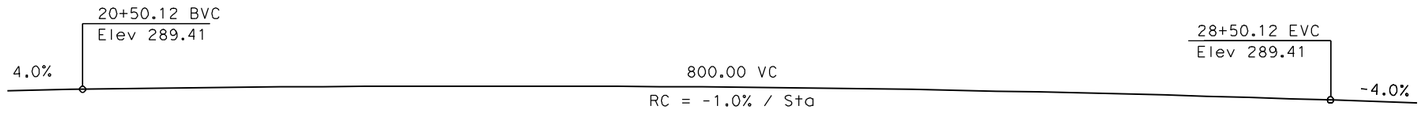
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

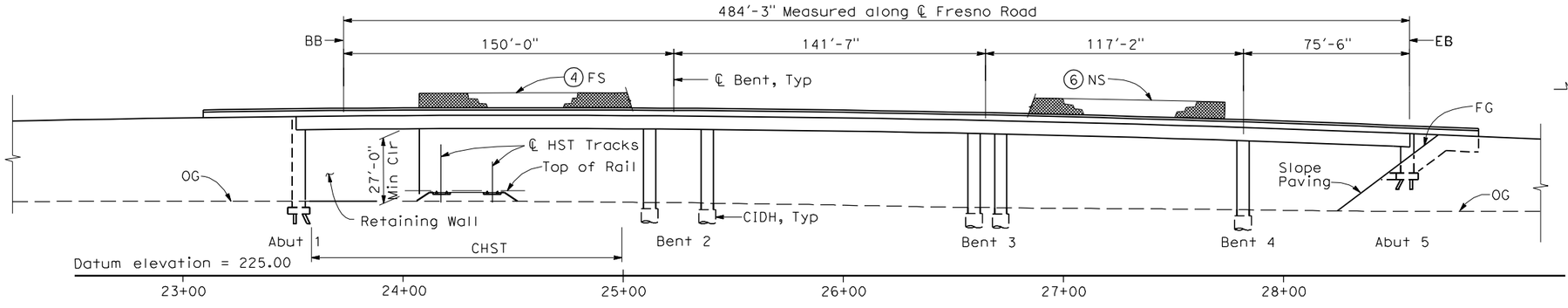
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION (ALTERNATIVE 2)
AVENUE 21/AVENUE 24
LE GRAND ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1055
SCALE AS SHOWN
SHEET NO. OF

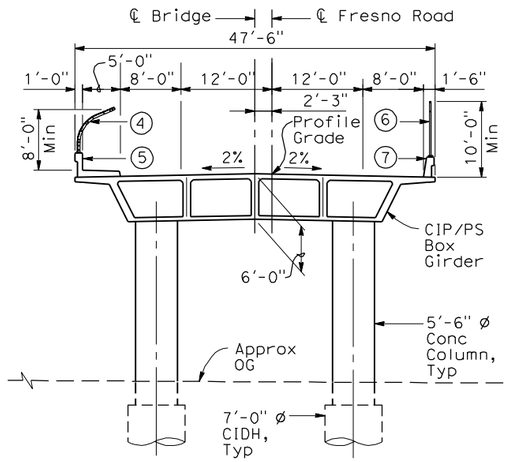
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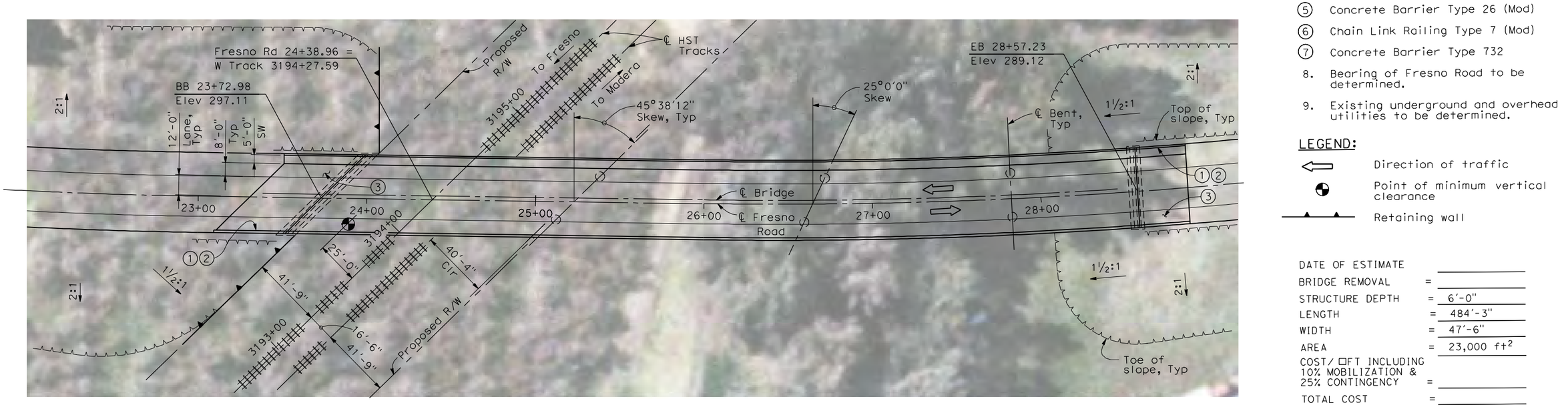

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"




## PLAN
1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Fresno Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Fresno Road to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 484'-3" |
| WIDTH | = | 47'-6" |
| AREA | = | 23,000 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 76**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

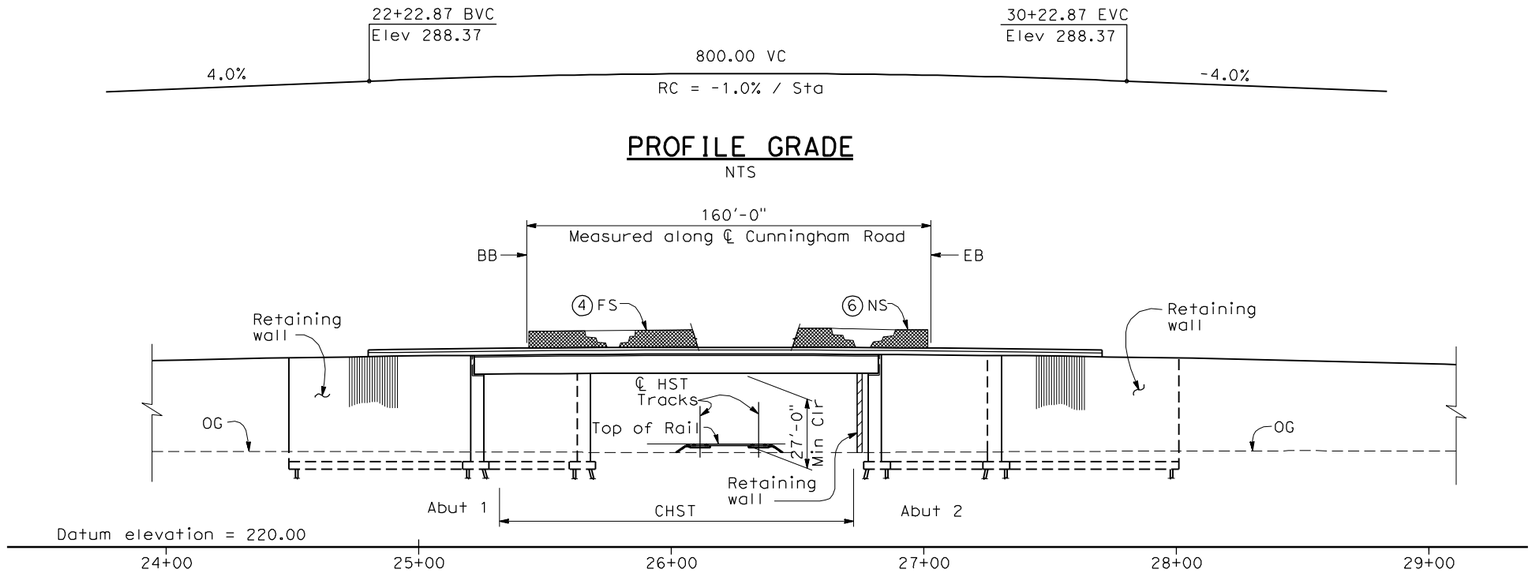
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION (ALTERNATIVE 2)
AVENUE 21/AVENUE 24
FRESNO ROAD OVERHEAD
PLANNING STUDY

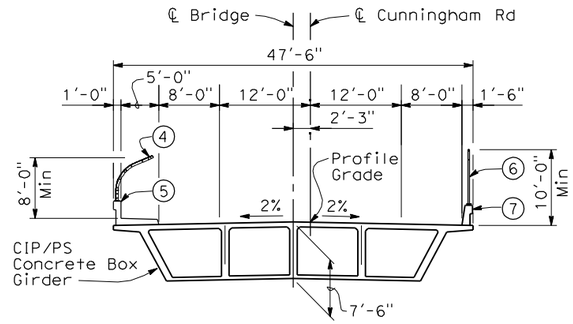
CONTRACT NO. HSR06-007
DRAWING NO. ST1056
SCALE AS SHOWN
SHEET NO. OF

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cisnerose




## PROFILE GRADE

NTS

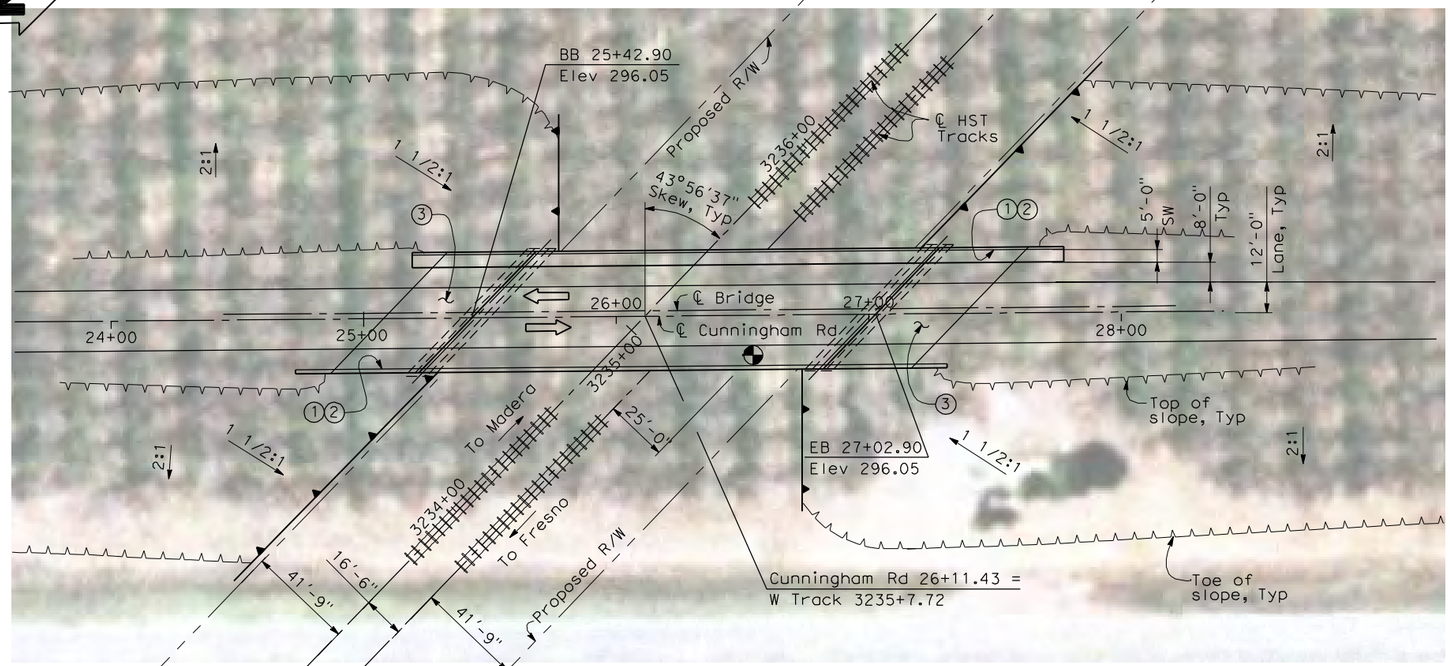



## TYPICAL SECTION

1" = 10'-0"

## ELEVATION

1" = 30'-0"




## PLAN

1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. xx-xx"
2. Paint "Cunningham Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining wall

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 7'-6" |
| LENGTH | = | 160'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 7,600 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 77**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY J. TANG
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

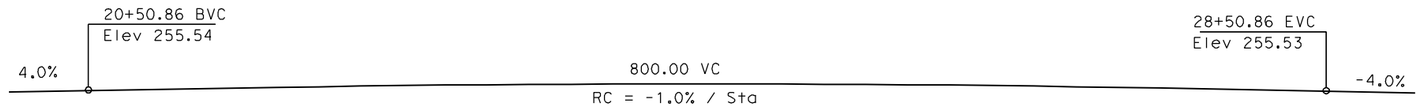
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

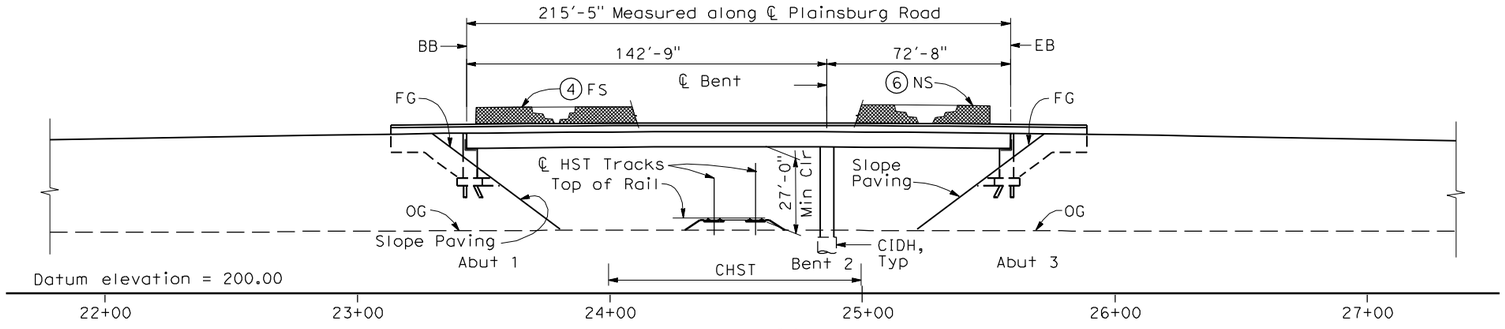
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION (ALTERNATIVE 2)
AVENUE 21/AVENUE 24
CUNNINGHAM ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1057
SCALE AS SHOWN
SHEET NO. OF

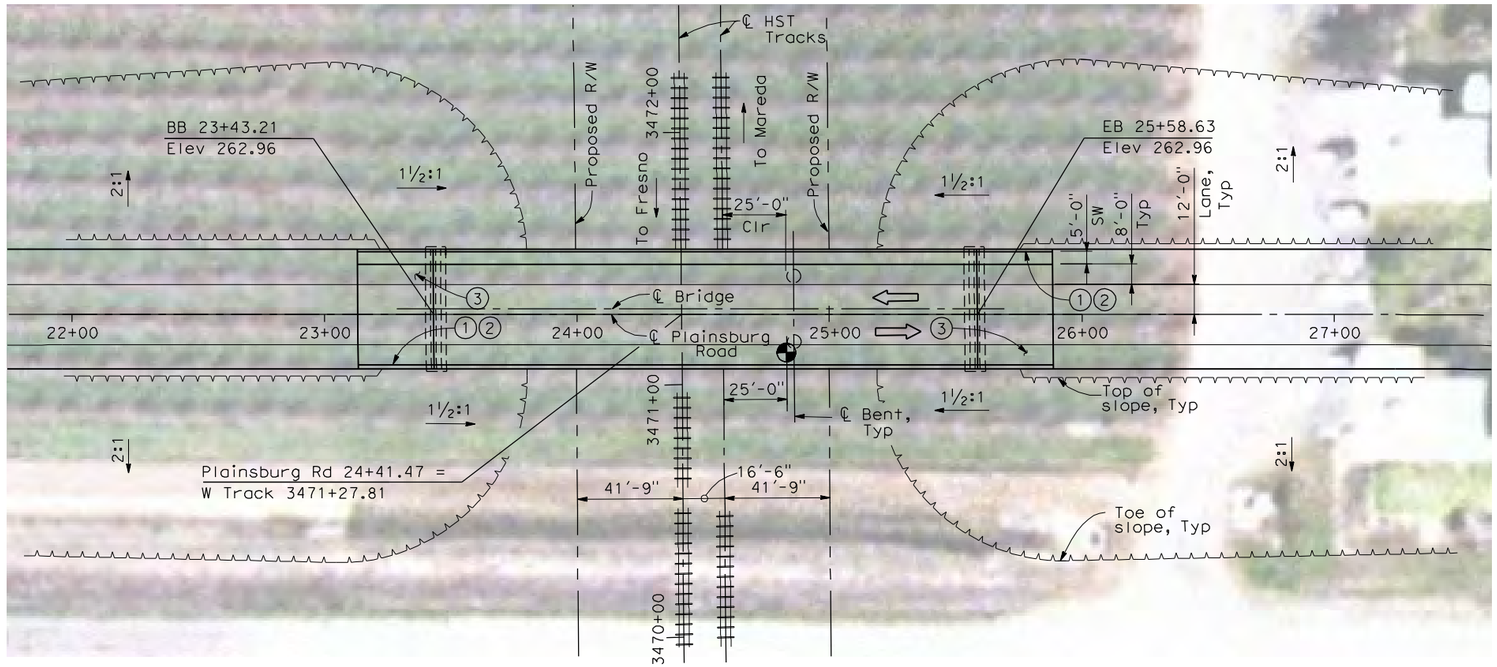
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cisnerose



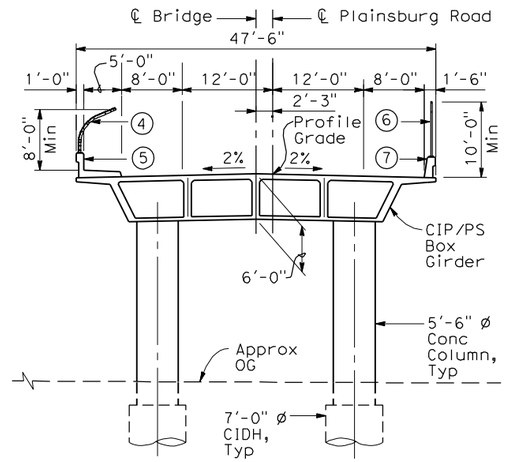

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"

NOTES:

1. Paint "Bridge No. XX-XX"
2. Paint "Plainsburg Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Plainsburg Road to be determined.
9. Existing underground and overhead utilities to be determined.

LEGEND:

⇦ Direction of traffic

Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 215'-5" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,230 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 78**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. HODELL
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

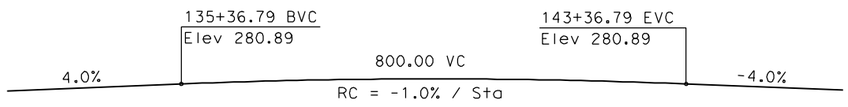
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION (ALTERNATIVE 2)
AVENUE 21/AVENUE 24
PLAINSBURG ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1058
SCALE AS SHOWN
SHEET NO. OF

4/30/2011 4:27:15 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructure\From Oakland\VM-MF-ST1058.dgn
cisnerose




## PROFILE GRADE
NTS

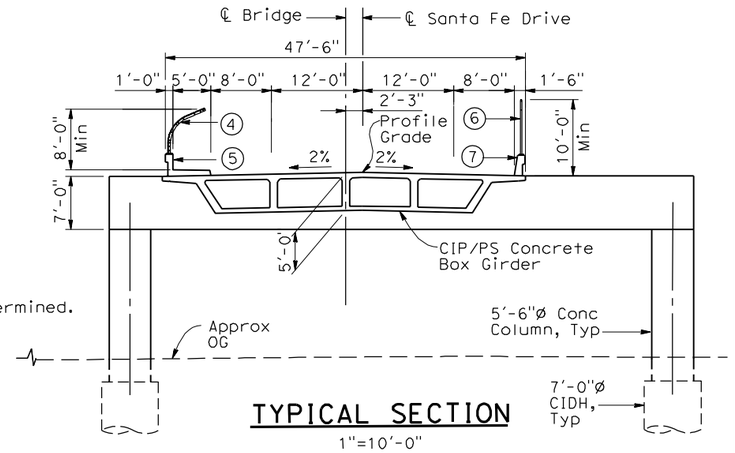
**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance
- Retaining Wall

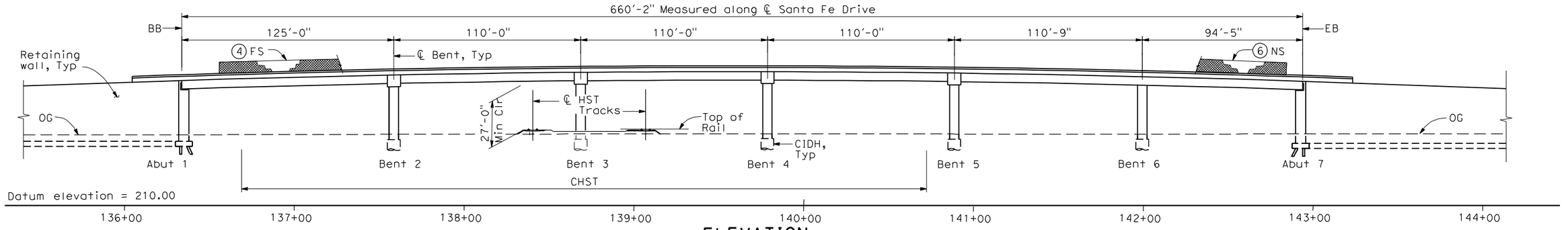
| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 5'-0" |
| LENGTH | = | 660'-2" |
| WIDTH | = | 47'-6" |
| AREA | = | 31,360 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**NOTES:**

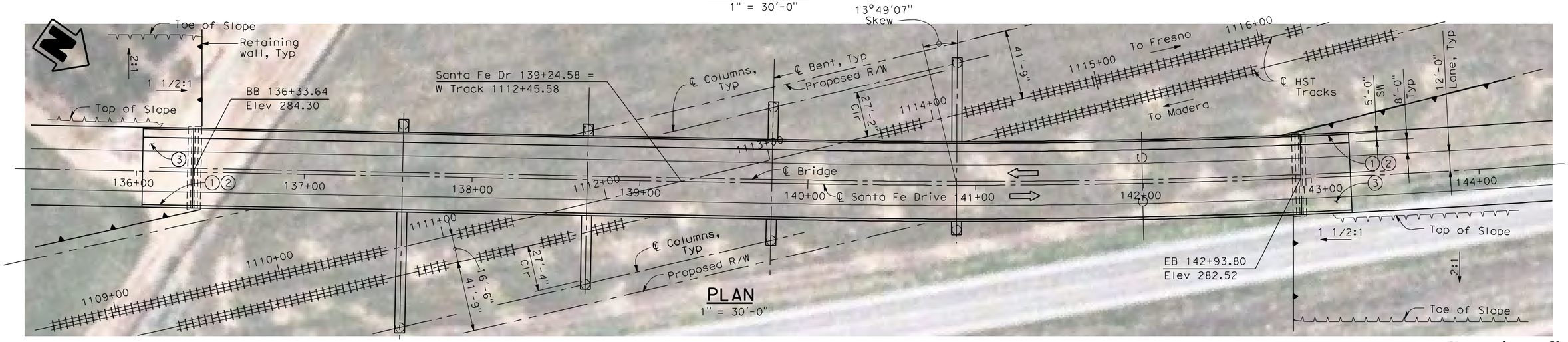
1. Paint "Bridge No. XX-XX"
2. Paint "Santa Fe Drive OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Santa Fe Drive to be determined.
9. Existing underground and overhead utilities to be determined.




## TYPICAL SECTION
1"=10'-0"




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"

**LOCATION 79**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

| | |
|---|---|
| DESIGNED BY | H. LEE |
| DRAWN BY | J. HODELL |
| CHECKED BY | L. LEUNG |
| IN CHARGE | A. BOONE |
| DATE | 04/29/2011 |

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

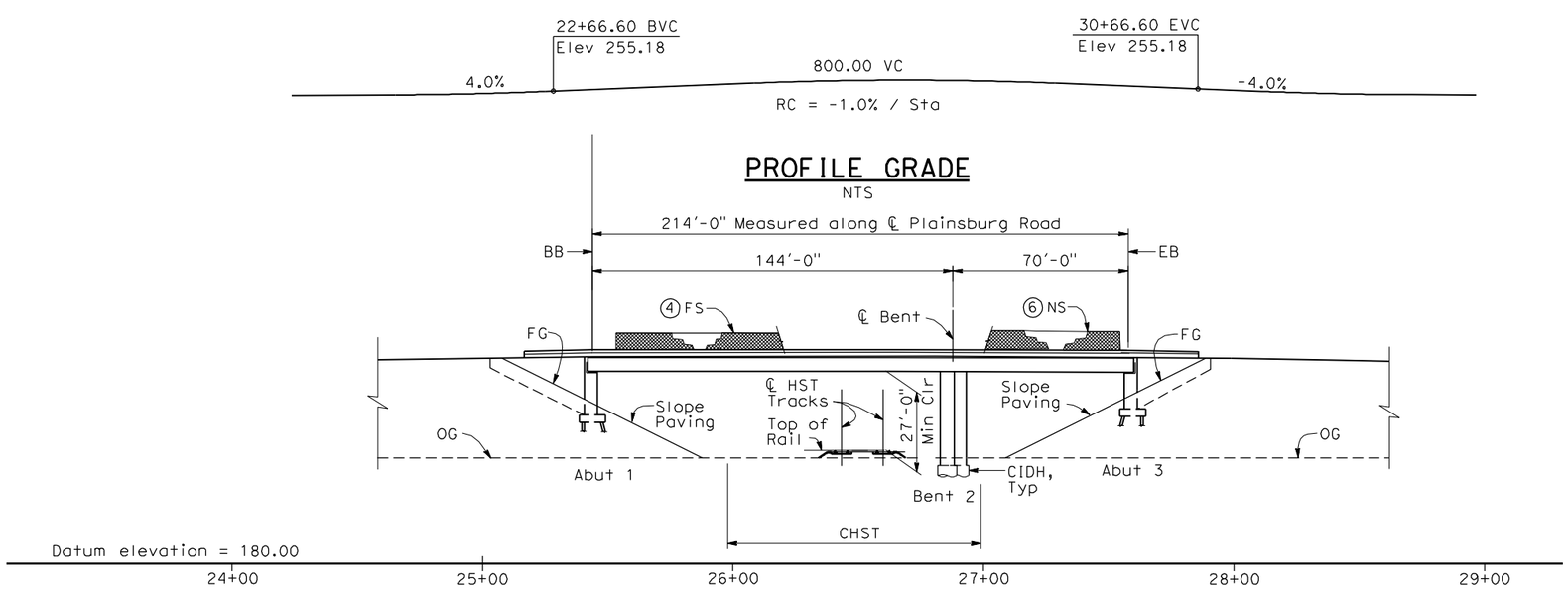
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION (ALTERNATIVE 3)
AVENUE 21/AVENUE 24
SANTA FE DRIVE OVERHEAD
PLANNING STUDY

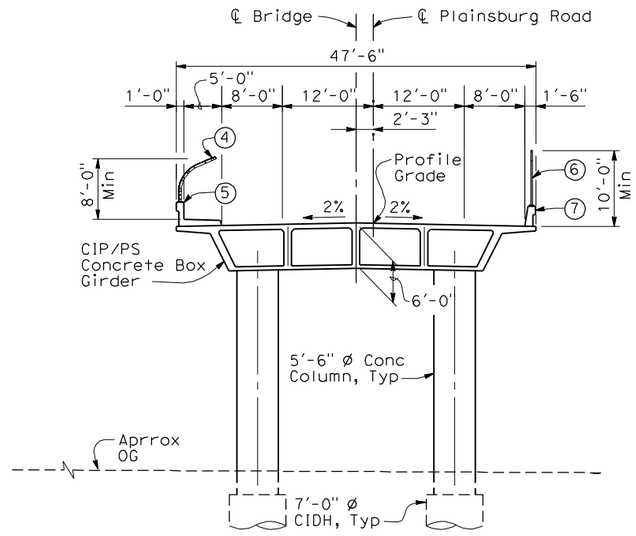
| | |
|---|---|
| CONTRACT NO. | HSR06-007 |
| DRAWING NO. | ST1059 |
| SCALE | AS SHOWN |
| SHEET NO. | OF |

cisnerose 4/30/2011 4:27:41 PM I:\CHSR\60022962\Task-02_Merced-Fresno\CADD\Struct\Sheet\APS\A1\15% cost reduction submittal\GradeStructureFrom Oakland\M-MF-ST1059.dgn

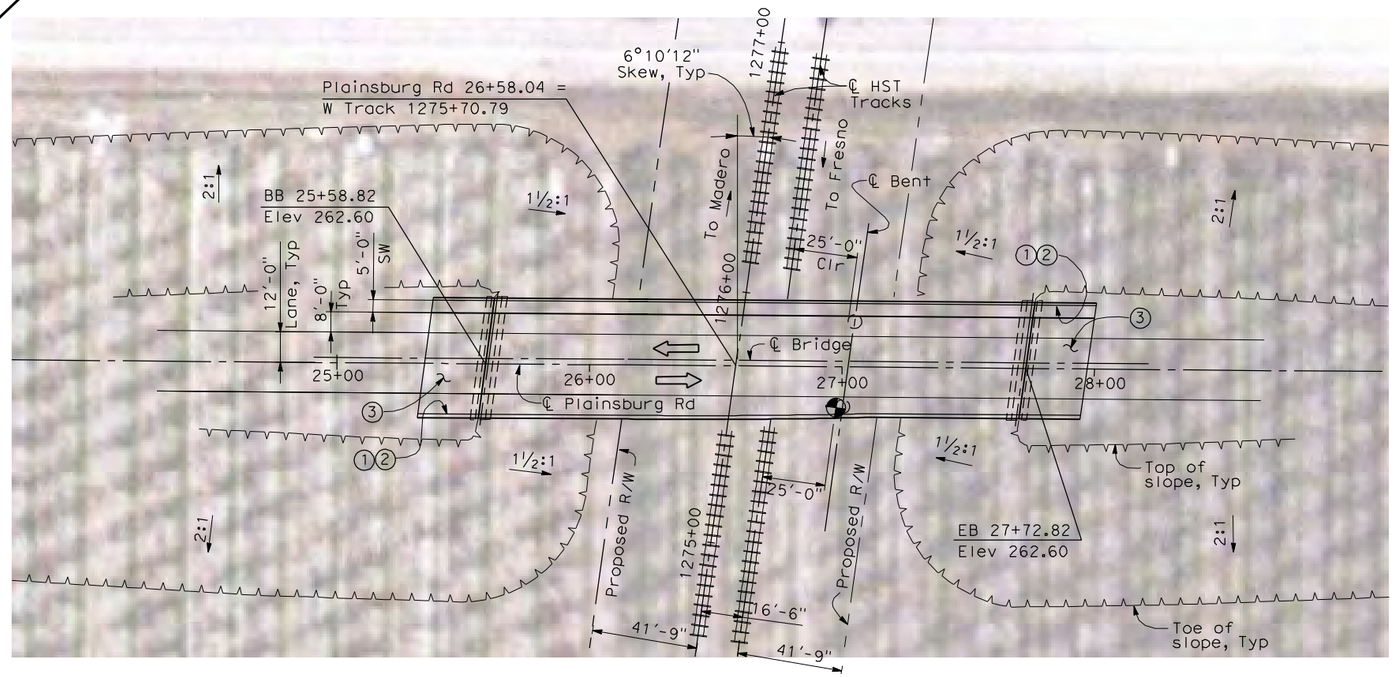



## PROFILE GRADE
NTS

## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"




## PLAN
1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. xx-xx"
2. Paint "Plainsburg Road OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

⟸ Direction of traffic

Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 214'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,170 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 80**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY J. TANG
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

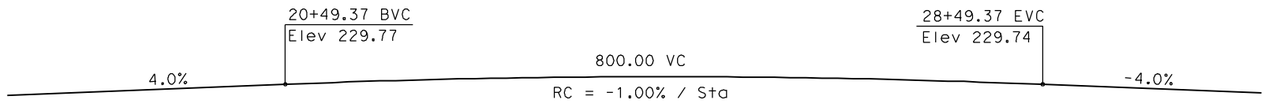
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

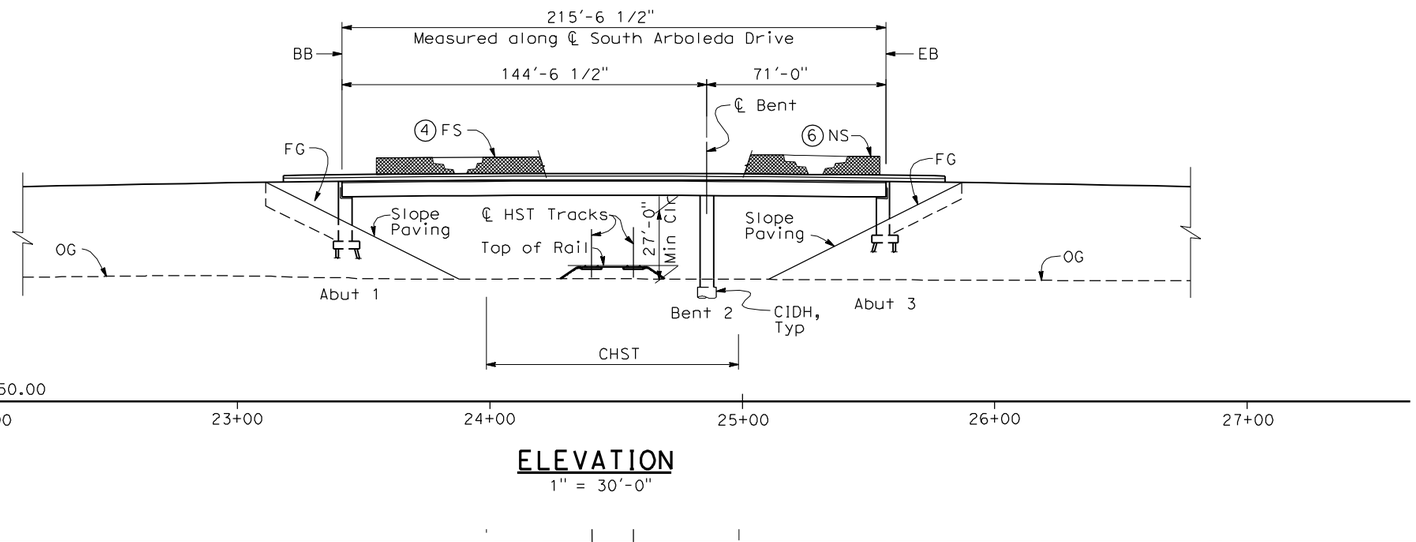
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MERCED CONNECTION (ALTERNATIVE 3)
AVENUE 21/AVENUE 24
PLAINSBURG ROAD OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1060
SCALE AS SHOWN
SHEET NO. OF

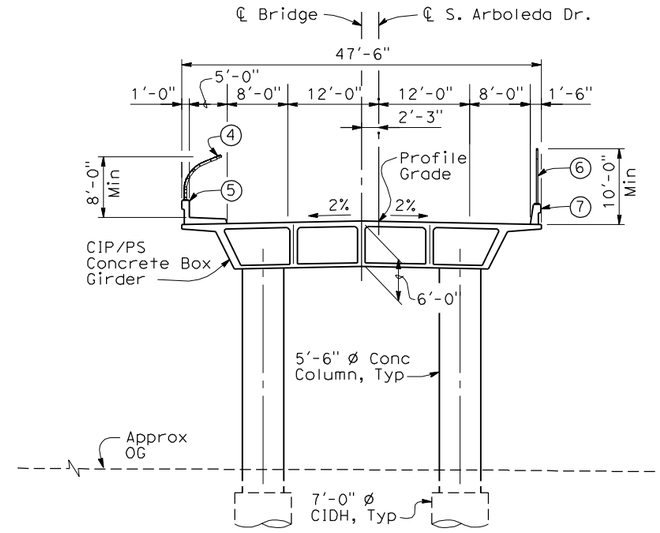
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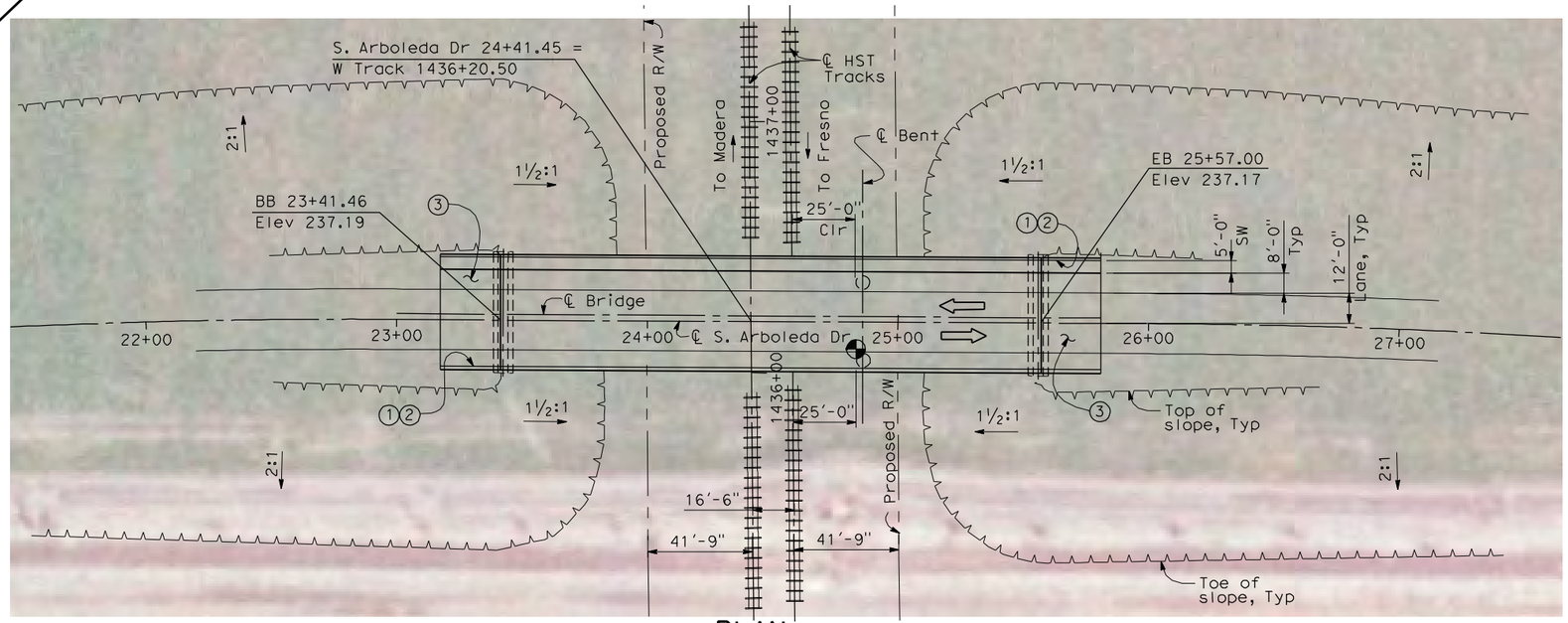

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"




## PLAN
1" = 30'-0"

**NOTES:**

1. Paint "Bridge No. xx-xx"
2. Paint "South Arboleda Drive OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 215'-6½" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,240 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 81**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY H. LEE
DRAWN BY J. TANG
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

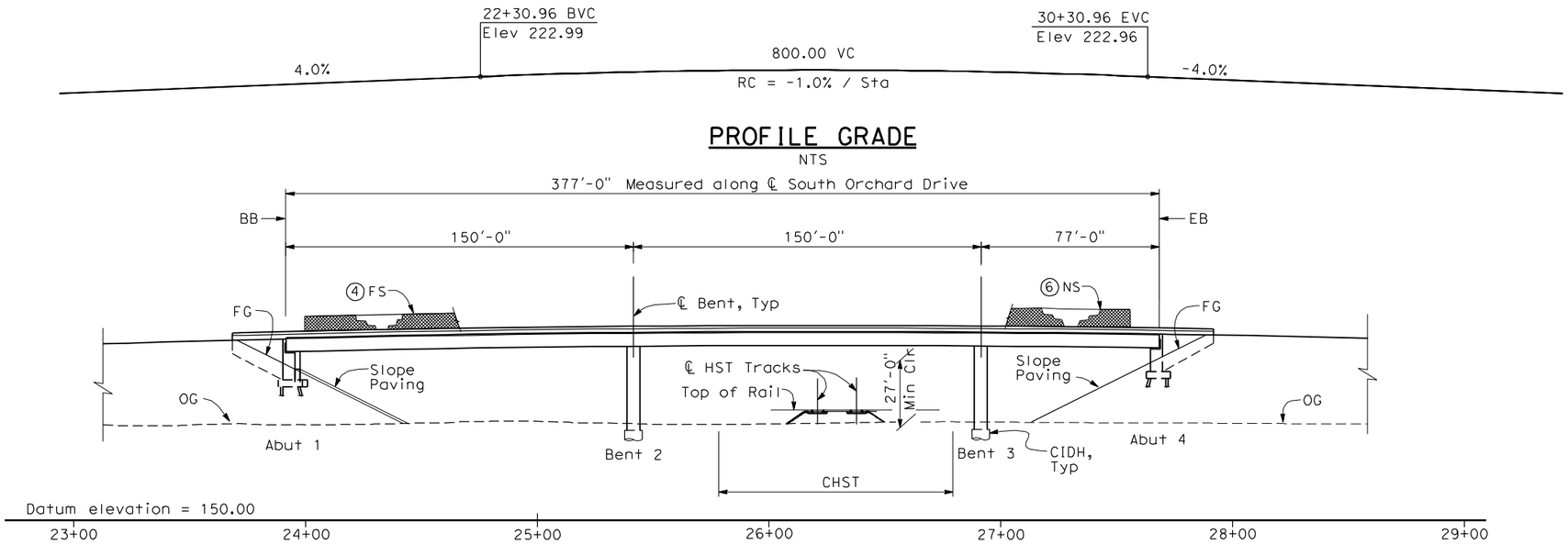
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF MERCED CONNECTION (ALTERNATIVE 3)
AVENUE 21/AVENUE 24
SOUTH ARBOLEDA DRIVE OVERHEAD
PLANNING STUDY

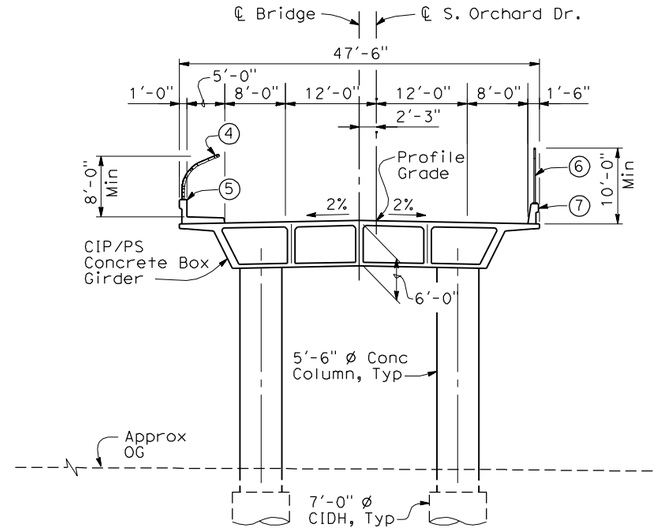
CONTRACT NO. HSR06-007
DRAWING NO. ST1061
SCALE AS SHOWN
SHEET NO. OF

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cisnerose

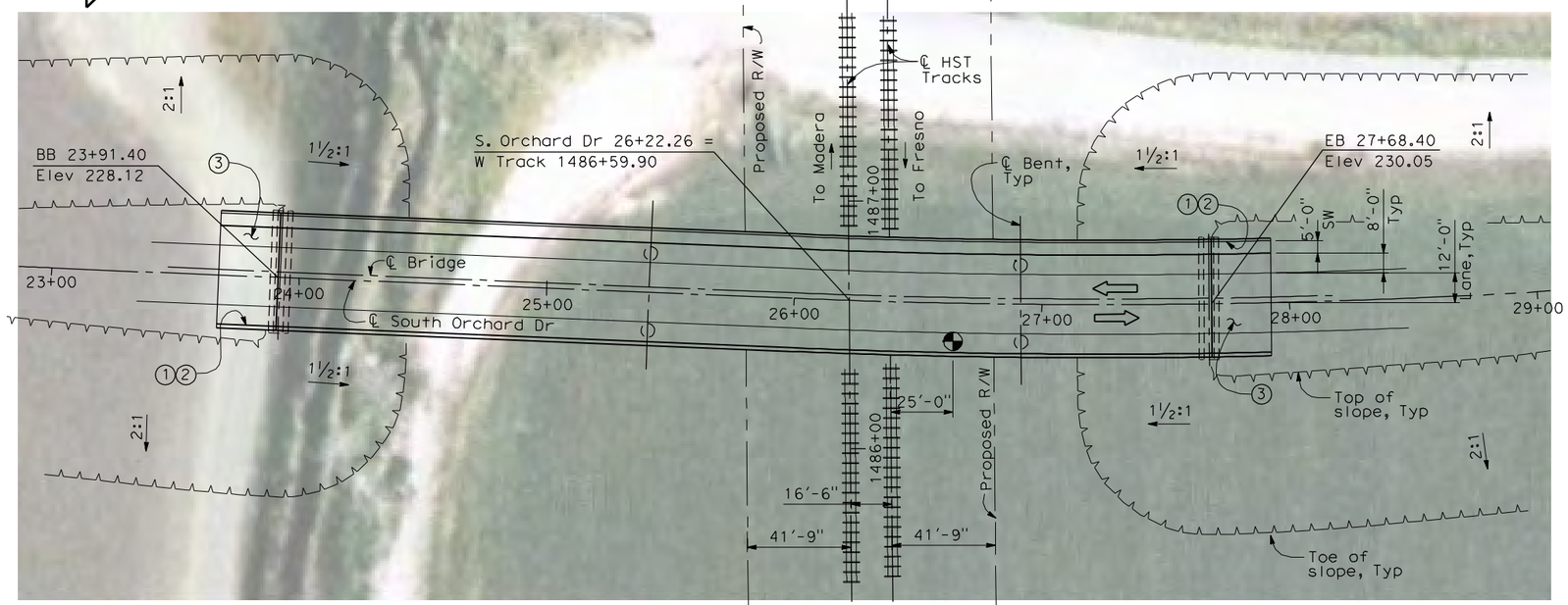



## PROFILE GRADE
NTS

## ELEVATION
1" = 30'-0"




## TYPICAL SECTION
1" = 10'-0"




## PLAN
1" = 30'-0"

NOTES:

1. Paint "Bridge No. xx-xx"
2. Paint "South Orchard Drive OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

LEGEND:

⇦ Direction of traffic

⊕ Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 377'-0" |
| WIDTH | = | 47'-6" |
| AREA | = | 17,910 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 82**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. LEE
DRAWN BY J. TANG
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET 15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

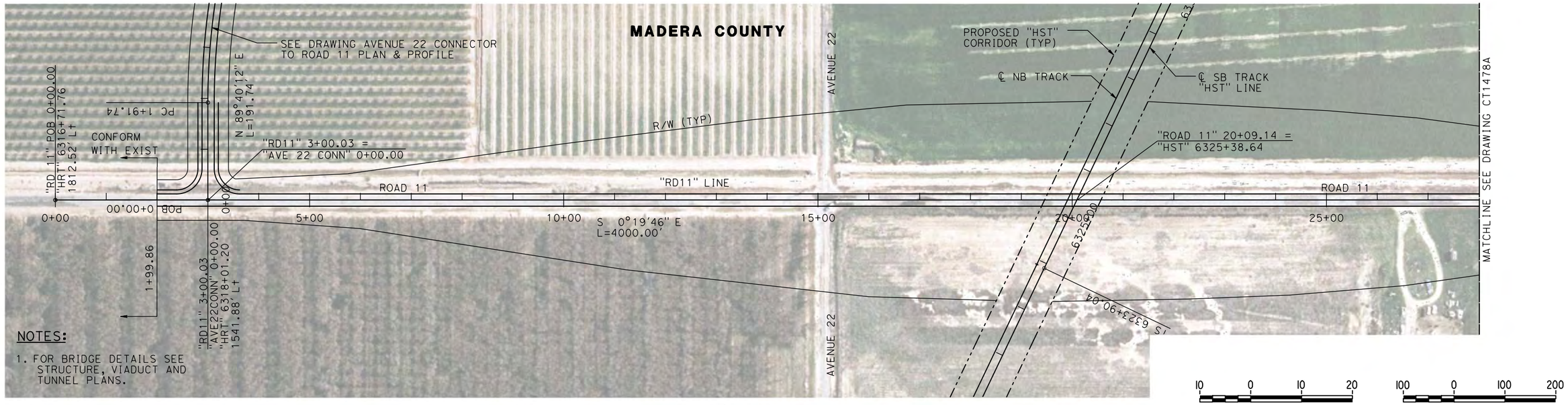
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

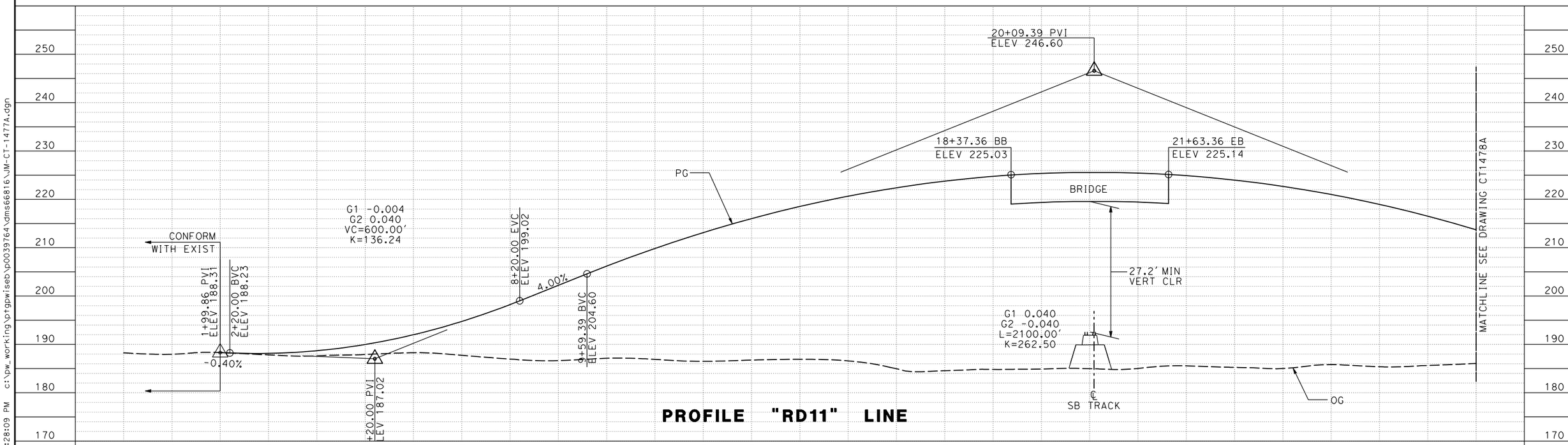
BNSF MERCED CONNECTION (ALTERNATIVE 3)
AVENUE 21/AVENUE 24
SOUTH ORCHARD DRIVE OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1062
SCALE AS SHOWN
SHEET NO. OF

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**PLAN**




**PROFILE "RD11" LINE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

**15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY**

**NOT FOR CONSTRUCTION**

PARSONS

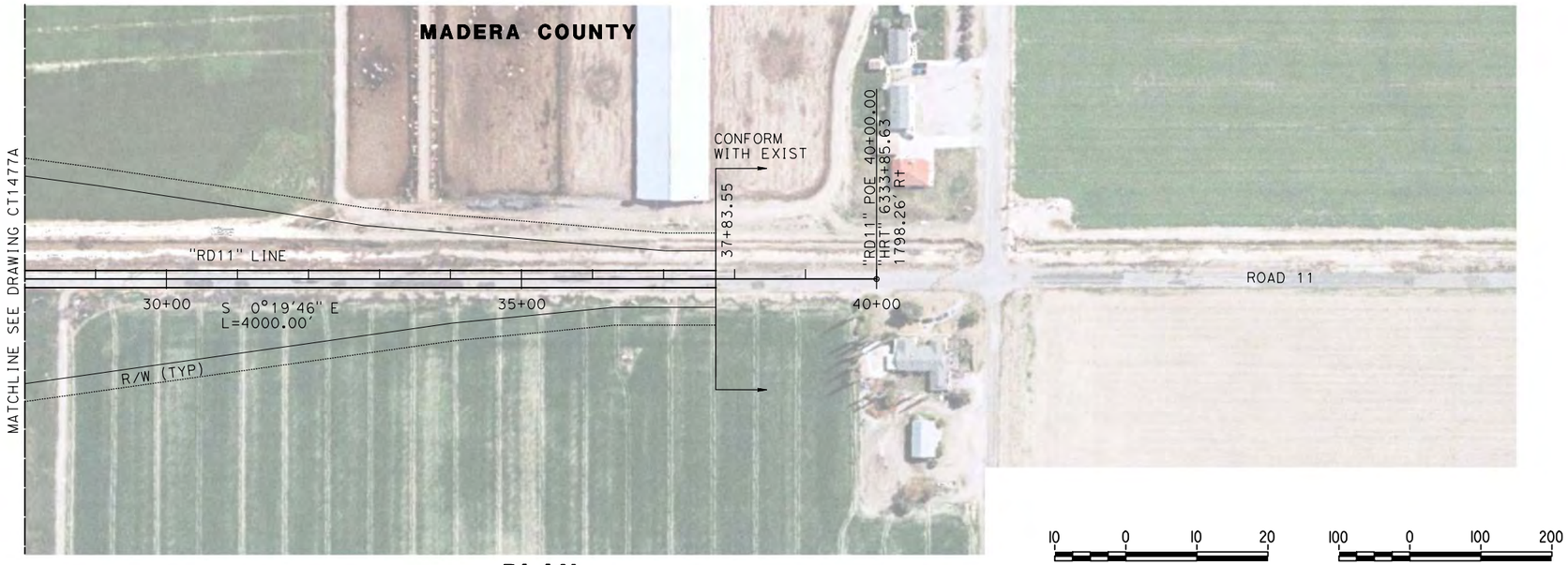
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

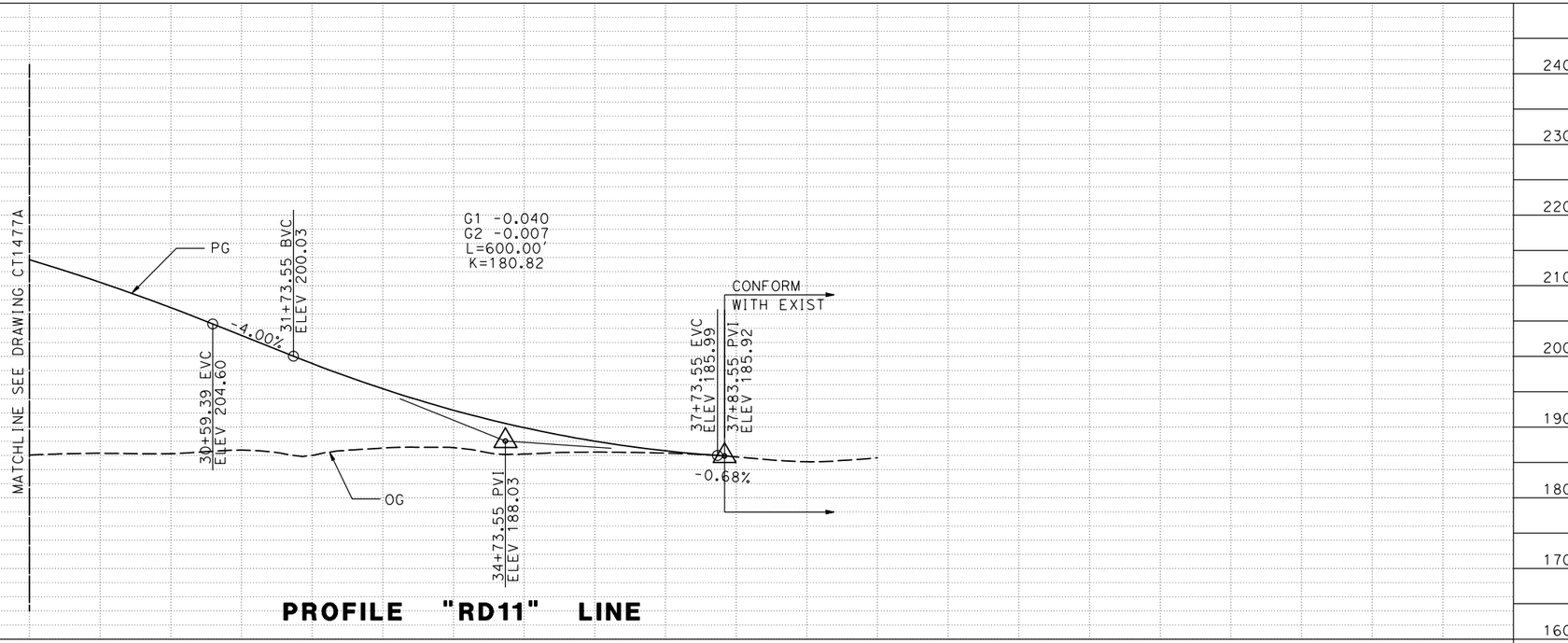
BNSF MAIN LINE
AVENUE 24/SR 152/AVENUE 21
ROAD 11 GRADE SEPARATION
PLAN AND PROFILE

CONTRACT NO. HSR08-05
DRAWING NO. CT1477A
SCALE AS SHOWN
SHEET NO. 1 OF 2

c:\pw_working\ptgpwiseb\p0039764\dms66816\JM-CT-1477A.dgn 7/20/2011 6:28:09 PM
p0039764




## PLAN




## PROFILE "RD11" LINE

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATION | | 8 | 9 | 30+00 | 1 | 2 | 3 | 4 | 35+00 | 6 | 7 | 8 | 9 | 40+00 | 1 | | | TOTAL |
| CY | EXC | | | | | | | | | | | | | | | | | |
| | EMB | | | | | | | | | | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

**15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY**

**NOT FOR CONSTRUCTION**

PARSONS

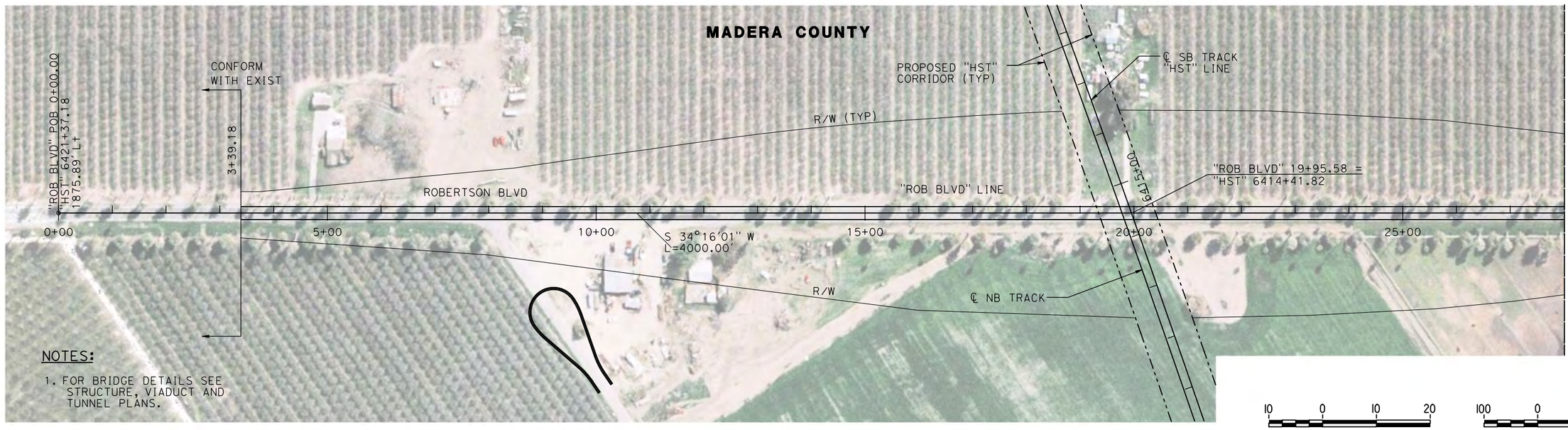
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 24/SR 152/AVENUE 21
ROAD 11 GRADE SEPARATION
PLAN AND PROFILE

CONTRACT NO. HSR08-05
DRAWING NO. CT1478A
SCALE AS SHOWN
SHEET NO. 2 OF 2

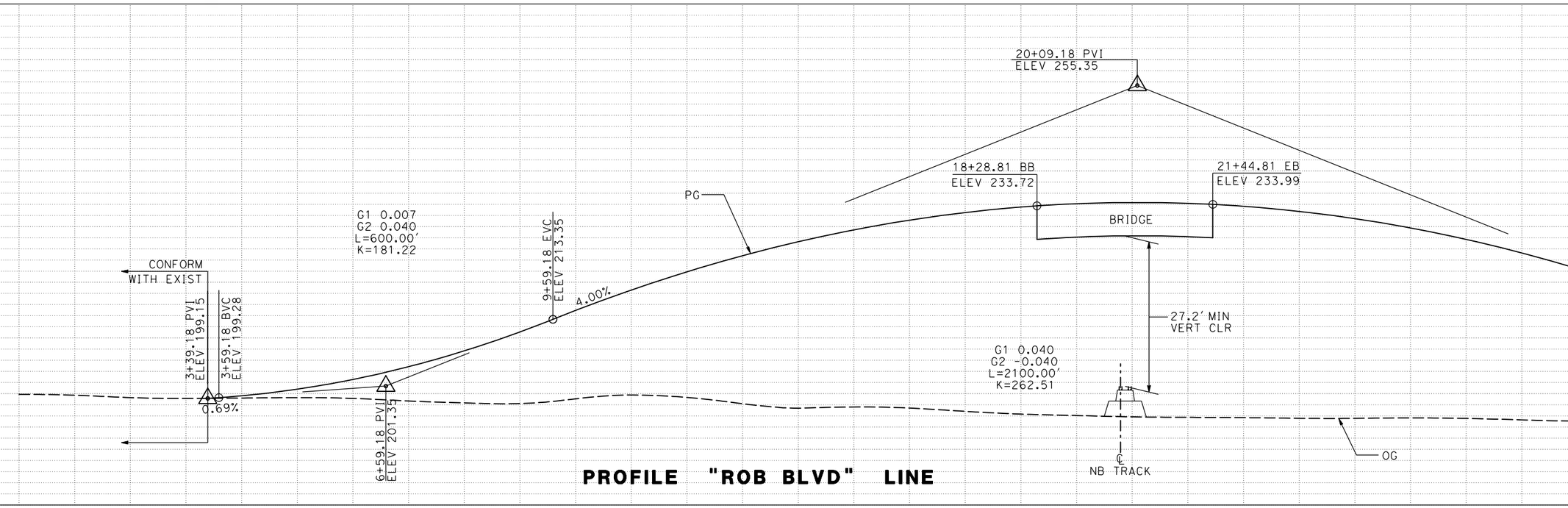
p0039764 7/20/2011 6:28:35 PM c:\pw_working\ptgpwiseb\p0039764\dms66816\JM-CT-1478A.dgn




**PLAN**

VERT: 1"=10'

HORIZ: 1"=100'




**PROFILE "ROB BLVD" LINE**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATION | 0+00 | 1 | 2 | 3 | 4 | 5+00 | 6 | 7 | 8 | 9 | 10+00 | 1 | 2 | 3 | 4 | 15+00 | 6 | 7 | 8 | 9 | 20+00 | 1 | 2 | 3 | 4 | 25+00 | 6 | 7 | 8 | TOTAL |
| CY EXC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CY EMB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: P. JACOBY
DRAWN BY: ALBERT S.
CHECKED BY: RESHMA C.
IN CHARGE: D. WEMMER
DATE: 4/15/2011

**15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY**

**NOT FOR CONSTRUCTION**

PARSONS

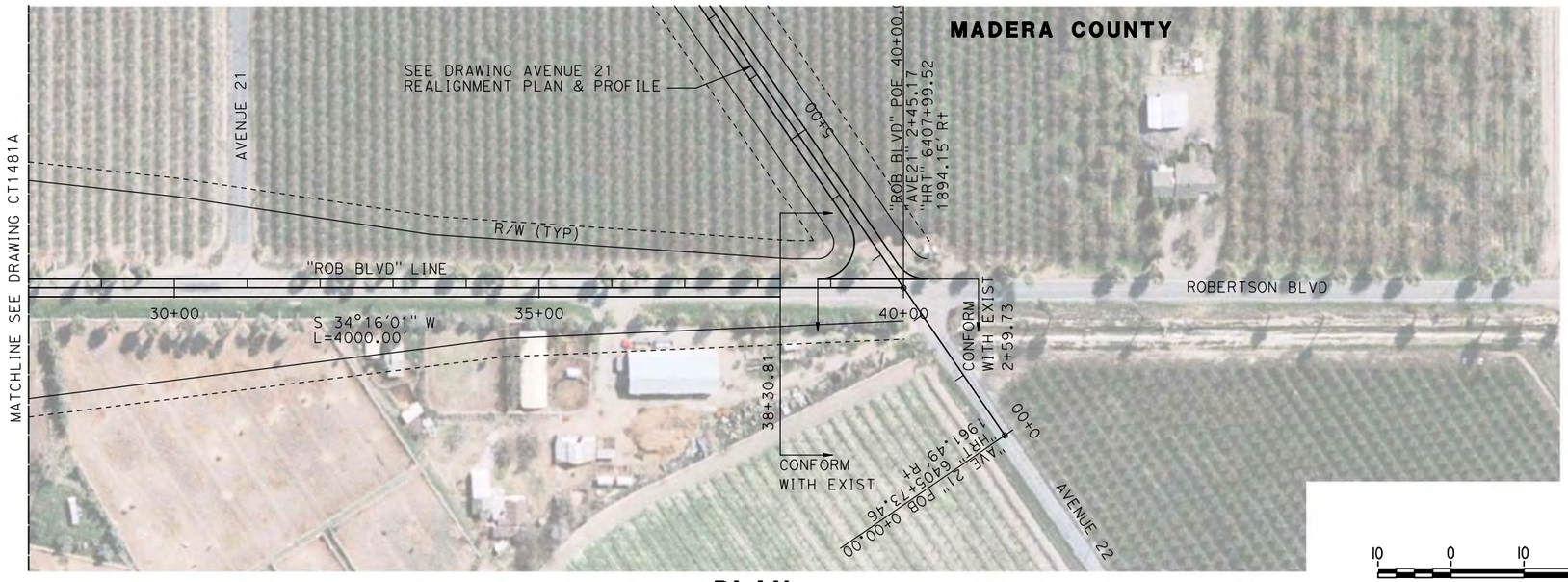
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 24/SR 152/AVENUE 21
ROBERTSON BLVD GRADE SEPARATION
PLAN AND PROFILE

CONTRACT NO. HSR08-05
DRAWING NO. CT1481A
SCALE AS SHOWN
SHEET NO. 1 OF 2

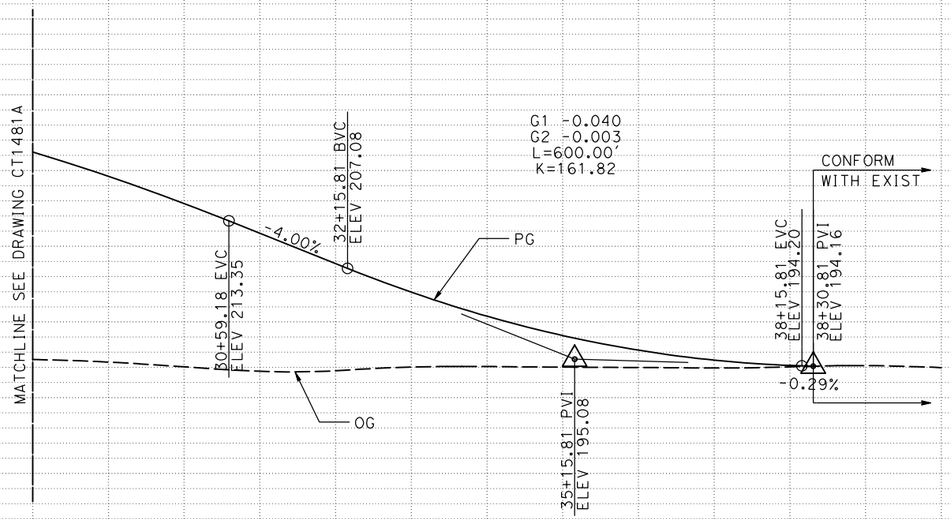
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**PLAN**

VERT: 1"=10'

HORIZ: 1"=100'




**PROFILE "ROB BLVD" LINE**

| STATION | | 8 | 9 | 30+00 | 1 | 2 | 3 | 4 | 35+00 | 6 | 7 | 8 | 9 | 40+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CY | EXC | | | | | | | | | | | | | | |
| | EMB | | | | | | | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

**15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY**

**NOT FOR CONSTRUCTION**

PARSONS

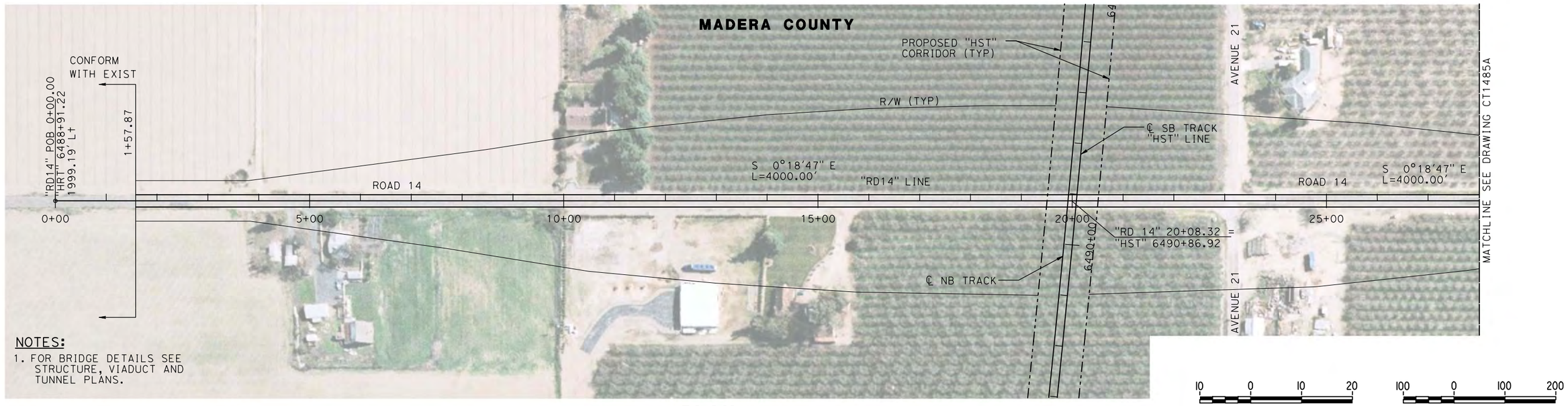
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 24/SR 152/AVENUE 21
ROBERTSON BLVD GRADE SEPARATION
PLAN AND PROFILE

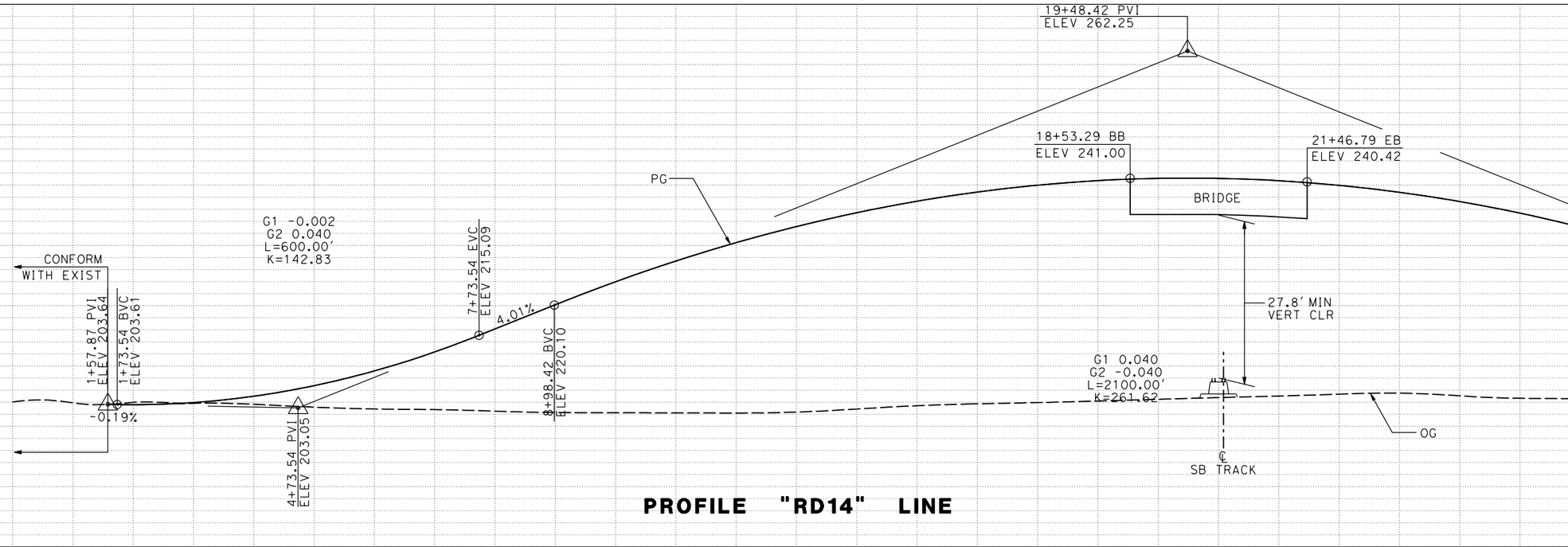
CONTRACT NO. HSR08-05
DRAWING NO. CT1482A
SCALE AS SHOWN
SHEET NO. 2 OF 2

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**PLAN**

VERT: 1"=10' HORIZ: 1"=100'




**PROFILE "RD14" LINE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

**15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY**

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PARSONS

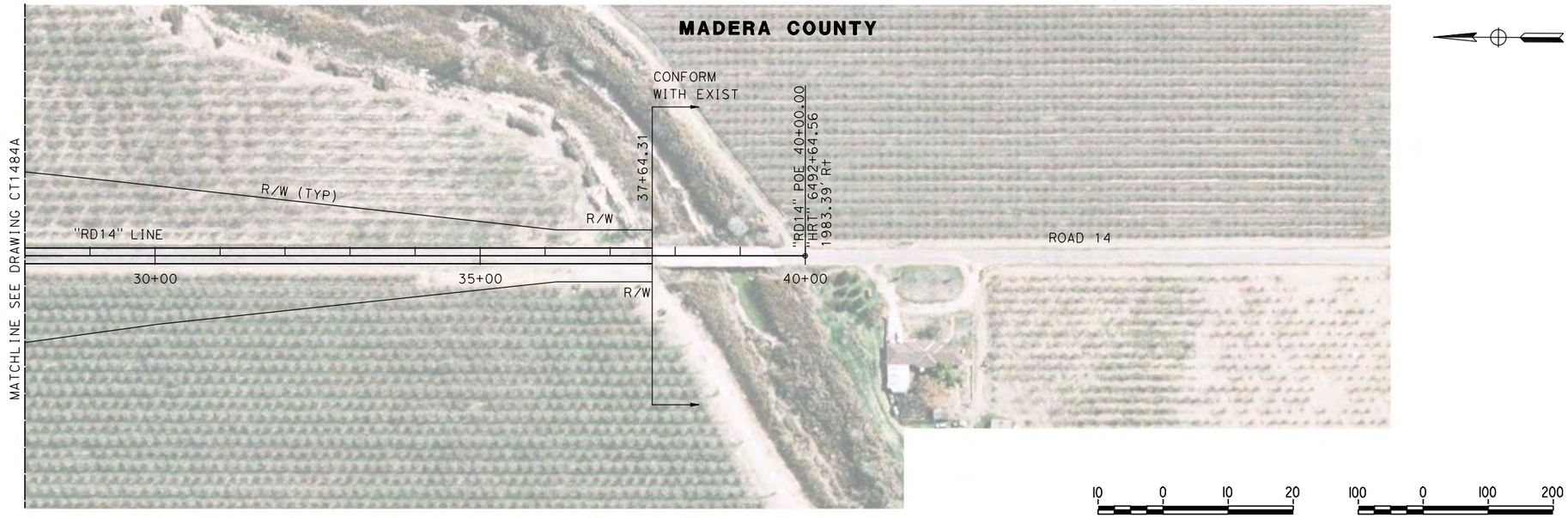
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 24/SR 152/AVENUE 21
ROAD 14 GRADE SEPARATION
PLAN AND PROFILE

CONTRACT NO. HSR08-05
DRAWING NO. CT1484A
SCALE AS SHOWN
SHEET NO. 1 OF 2

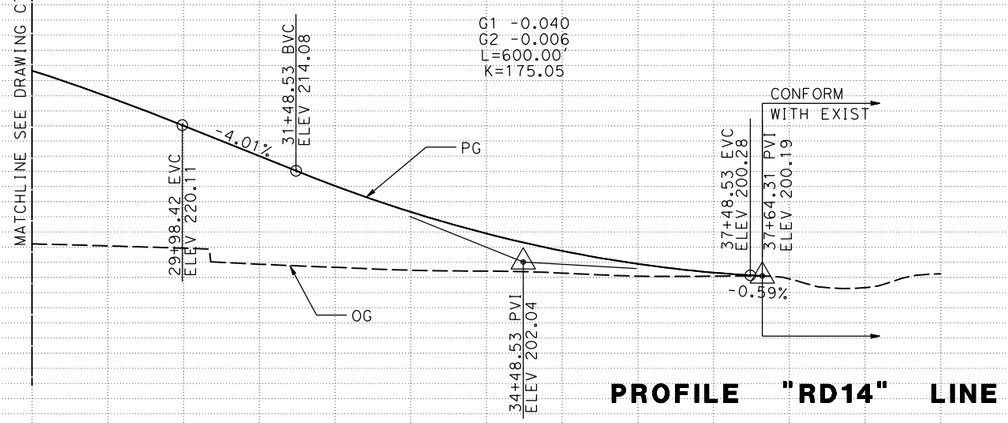
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**PLAN**

VERT: 1"=10'

HORIZ: 1"=100'




**PROFILE "RD14" LINE**

| STATION | 8 | 9 | 30+00 | 1 | 2 | 3 | 4 | 35+00 | 6 | 7 | 8 | 9 | 40+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CY EXC | | | | | | | | | | | | | | |
| CY EMB | | | | | | | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: P. JACOBY
DRAWN BY: ALBERT S.
CHECKED BY: RESHMA C.
IN CHARGE: D. WEMMER
DATE: 4/15/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

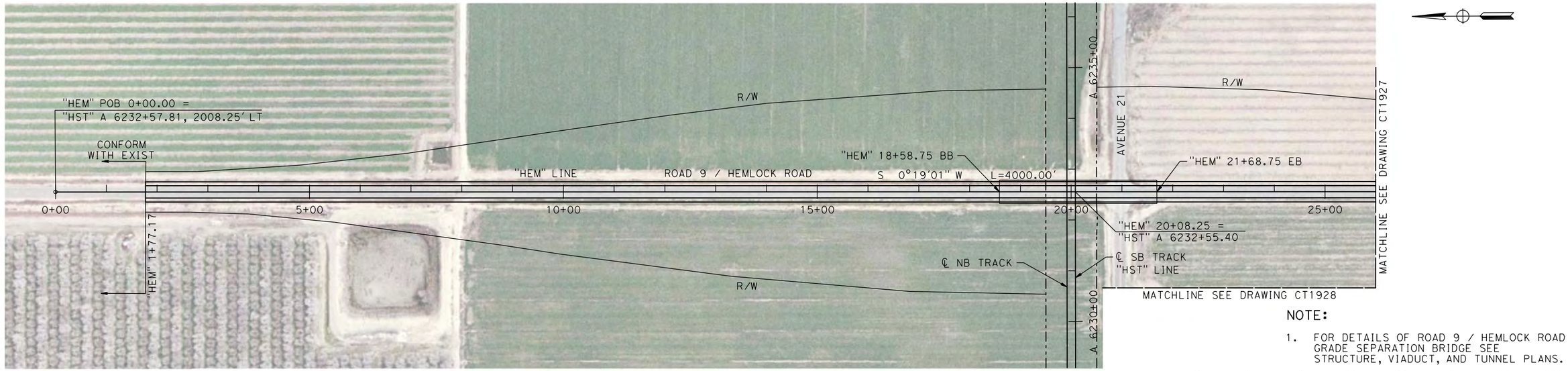
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 24/SR 152/AVENUE 21
ROAD 14 GRADE SEPARATION
PLAN AND PROFILE

CONTRACT NO. HSR08-05
DRAWING NO. CT1485A
SCALE AS SHOWN
SHEET NO. 2 OF 2

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## MADERA COUNTY



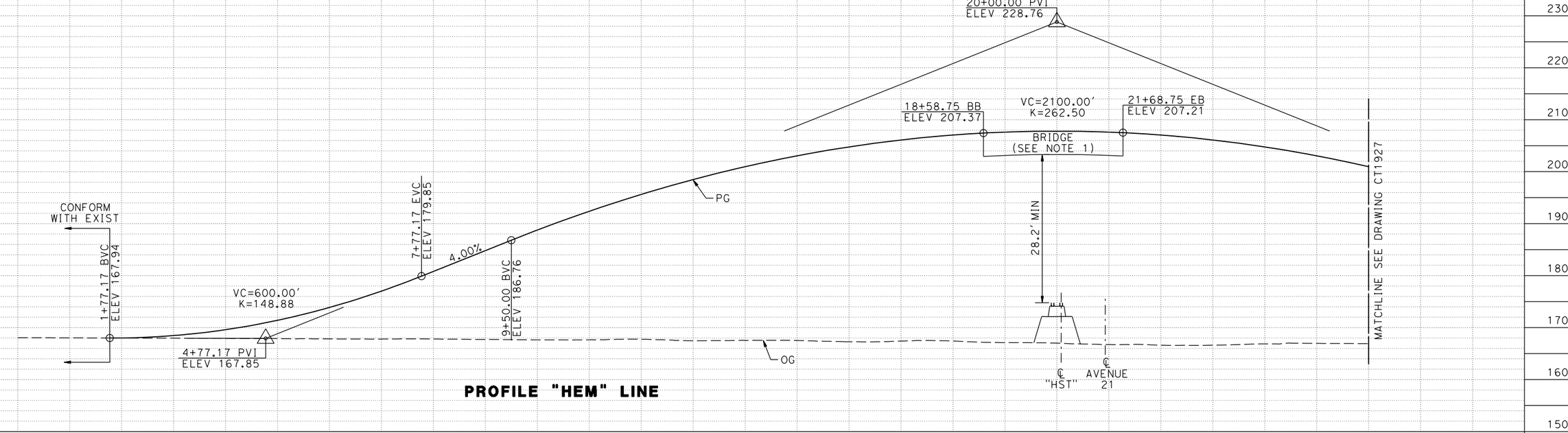

**PLAN**

NOTE:

1. FOR DETAILS OF ROAD 9 / HEMLOCK ROAD GRADE SEPARATION BRIDGE SEE STRUCTURE, VIADUCT, AND TUNNEL PLANS.

10 0 10 20 — VERT: 1"=10'

100 0 100 200 — HORIZ: 1"=100'




**PROFILE "HEM" LINE**

| STATION | | 0+00 | 5+00 | 10+00 | 15+00 | 20+00 | 25+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| CY | EXC | | | | | | | |
| | EMB | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. S. M.
DRAWN BY R. BROWNE
CHECKED BY M. SANTOS
IN CHARGE D. WEMMER
DATE 4/15/2011

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PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

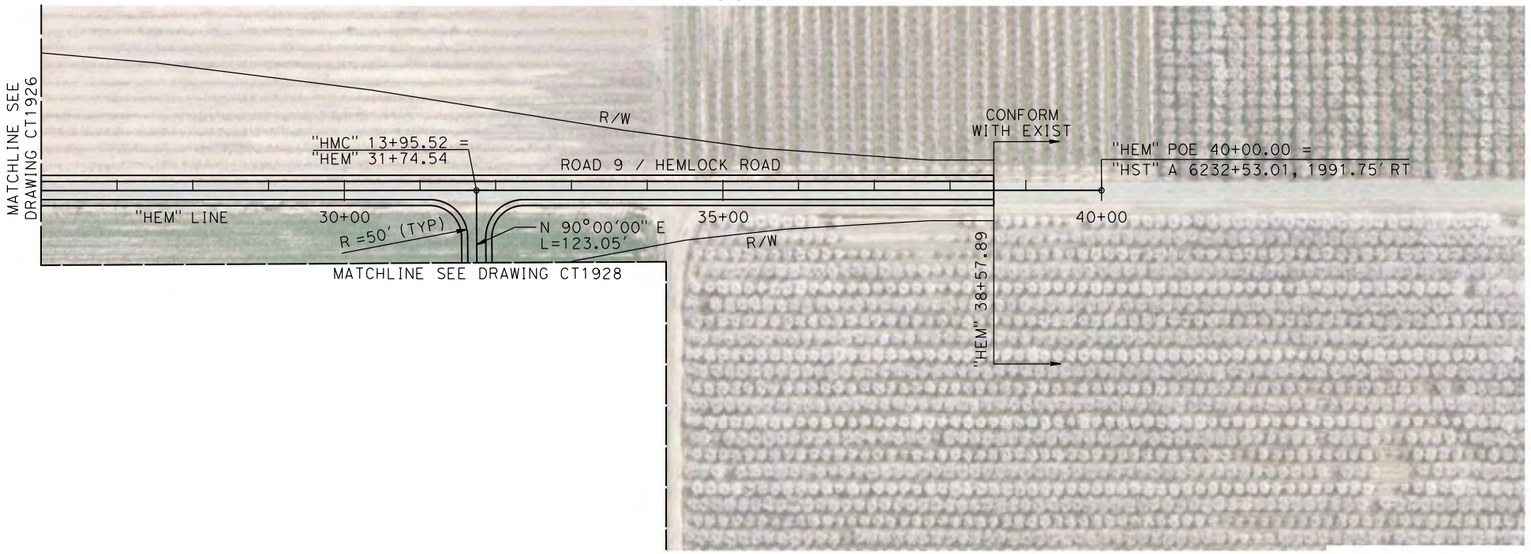
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 9 / HEMLOCK ROAD GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1926
SCALE AS NOTED
SHEET NO.

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## MADERA COUNTY



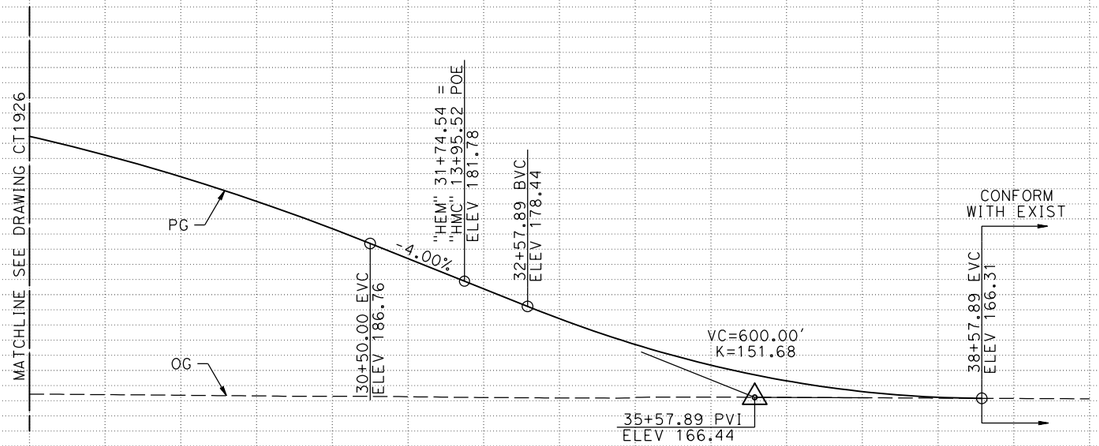

**PLAN**

NOTE:

1. SEE DRAWING CT1928 FOR DETAILS OF ROAD 9 / HEMLOCK ROAD TO AVENUE 21 CONNECTOR ROAD "HMC" LINE.

10 0 10 20 — VERT: 1"=10'

100 0 100 200 — HORIZ: 1"=100'




**PROFILE "HEM" LINE**

| STATION | 25+00 | 30+00 | 35+00 | 40+00 | TOTAL |
|---|---|---|---|---|---|
| CY EXC | | | | | |
| CY EMB | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: A. S. M.
DRAWN BY: R. BROWNE
CHECKED BY: M. SANTOS
IN CHARGE: D. WEMMER
DATE: 4/15/2011

**15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

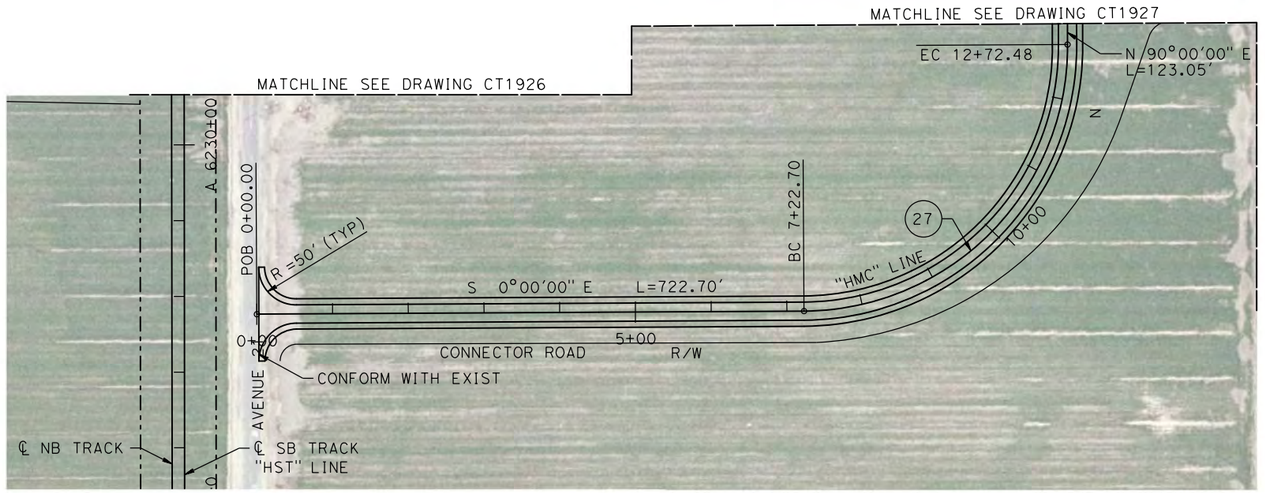
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 9 / HEMLOCK ROAD GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1927
SCALE AS NOTED
SHEET NO.

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# MADERA COUNTY



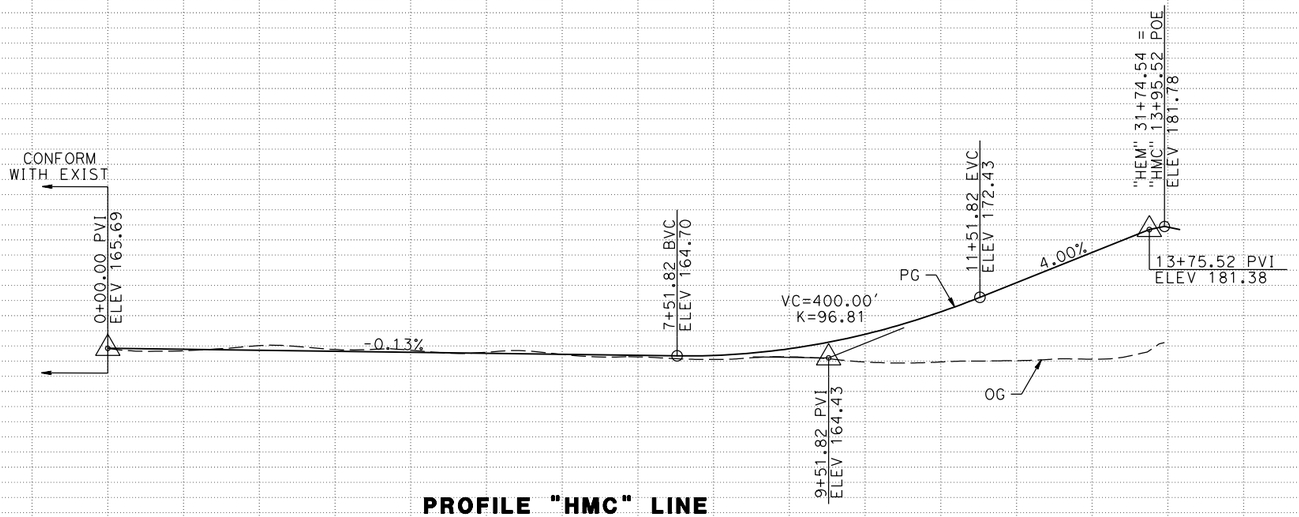

**PLAN**

NOTE:

1. SEE DRAWINGS CT1926 AND CT1927 FOR DETAILS OF ROAD 9 / HEMLOCK ROAD "HEM" LINE.

10 0 10 20
VERT: 1"=10'

100 0 100 200
HORIZ: 1"=100'




**PROFILE "HMC" LINE**

| STATION | | 0+00 | 5+00 | 10+00 | 15+00 | TOTAL |
|---|---|---|---|---|---|---|
| CY | EXC | | | | | |
| | EMB | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. S. M.
DRAWN BY R. BROWNE
CHECKED BY M. SANTOS
IN CHARGE D. WEMMER
DATE 4/15/2011

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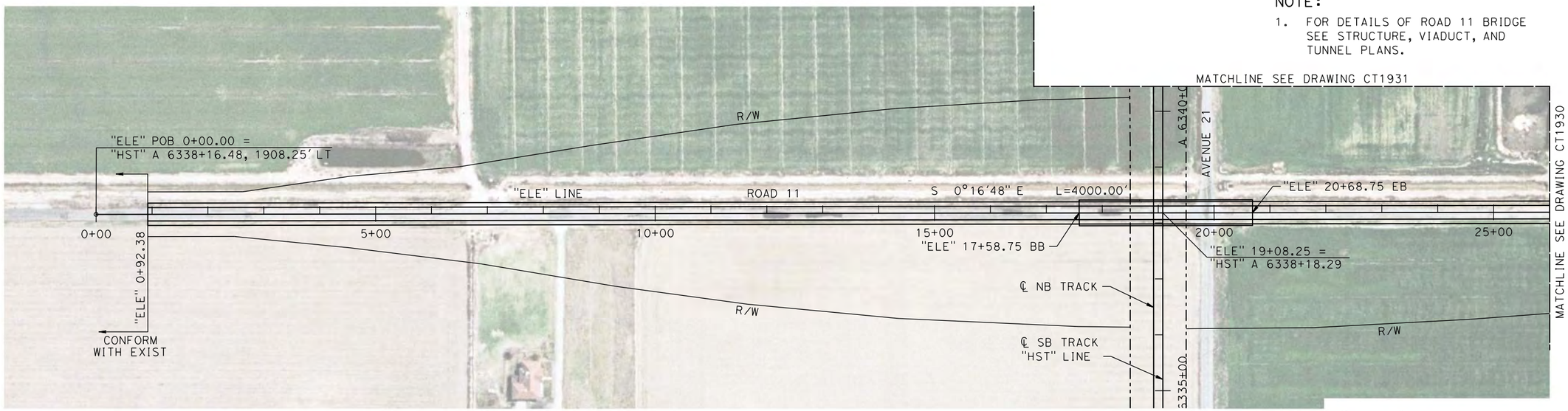
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 9 / HEMLOCK ROAD GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1928
SCALE AS NOTED
SHEET NO.

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## MADERA COUNTY



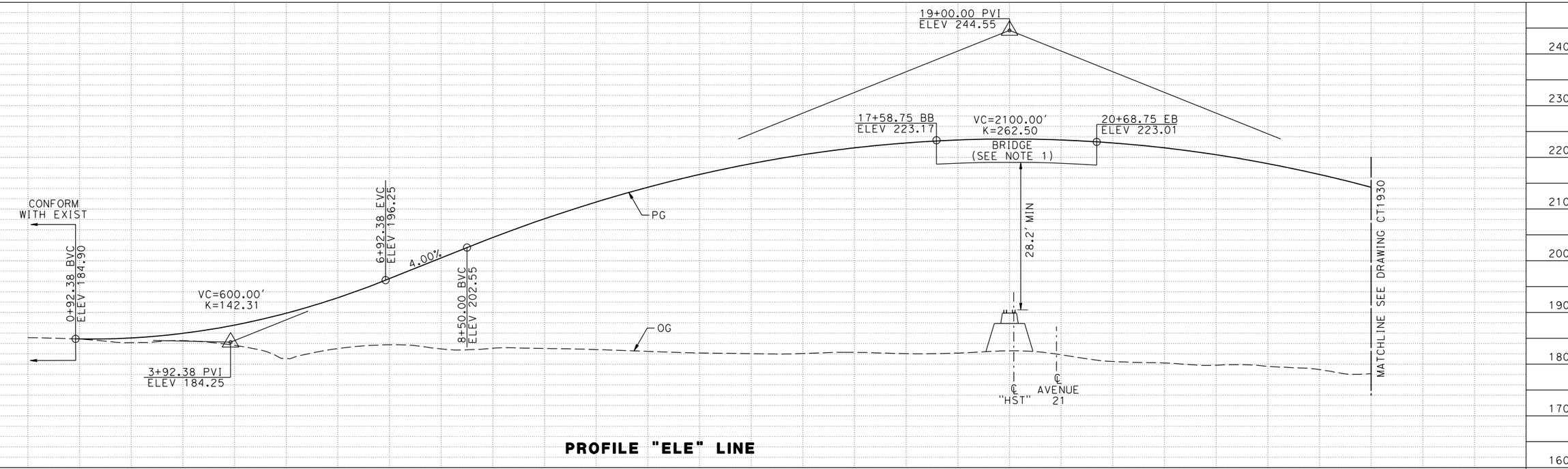

NOTE:

1. FOR DETAILS OF ROAD 11 BRIDGE SEE STRUCTURE, VIADUCT, AND TUNNEL PLANS.

**PLAN**

VERT: 1"=10'

HORIZ: 1"=100'




**PROFILE "ELE" LINE**

| STATION | 0+00 | 5+00 | 10+00 | 15+00 | 20+00 | 25+00 | TOTAL |
|---|---|---|---|---|---|---|---|
| CY EXC | | | | | | | |
| CY EMB | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. S. M.
DRAWN BY R. BROWNE
CHECKED BY M. SANTOS
IN CHARGE D. WEMMER
DATE 4/15/2011

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PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

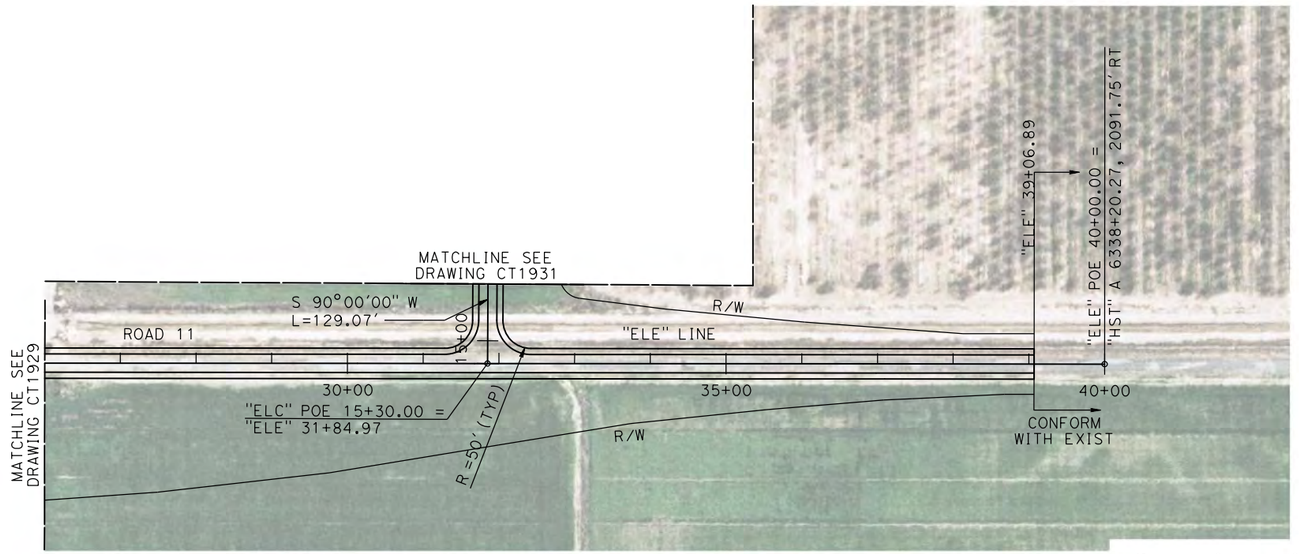
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 11 GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1929
SCALE AS NOTED
SHEET NO.

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## MADERA COUNTY



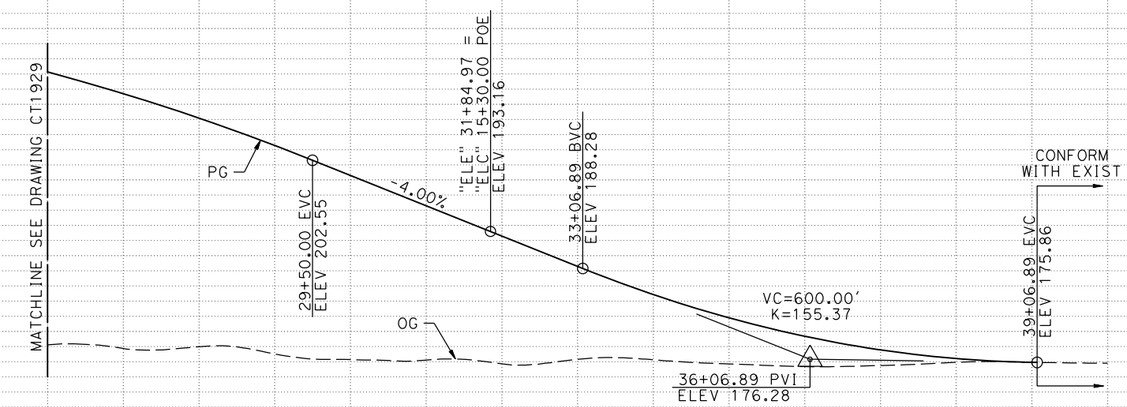

NOTE:

1. SEE DRAWING CT1931 FOR DETAILS OF ROAD 11 TO AVENUE 21 CONNECTOR ROAD "ELC" LINE.

**PLAN**

10 0 10 20
VERT: 1"=10'

100 0 100 200
HORIZ: 1"=100'




**PROFILE "ELE" LINE**

| STATION | | 30+00 | 35+00 | 40+00 | TOTAL |
|---|---|---|---|---|---|
| CY | EXC | | | | |
| | EMB | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. S. M.
DRAWN BY R. BROWNE
CHECKED BY M. SANTOS
IN CHARGE D. WEMMER
DATE 4/15/2011

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PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

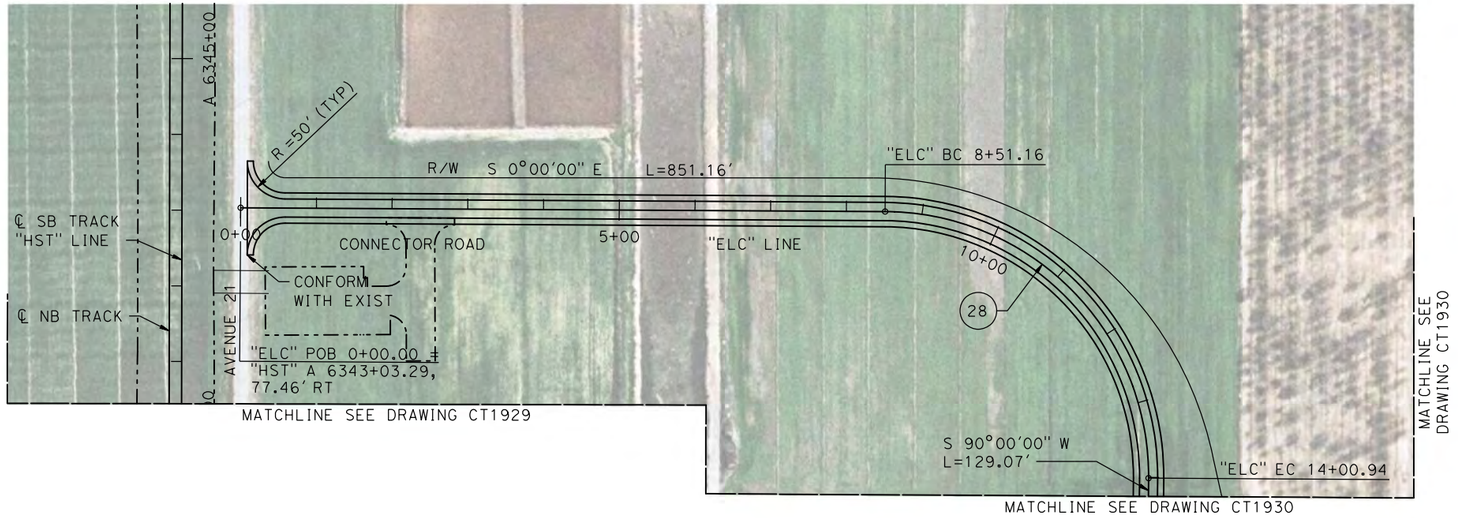
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 11 GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1930
SCALE AS NOTED
SHEET NO.

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## MADERA COUNTY



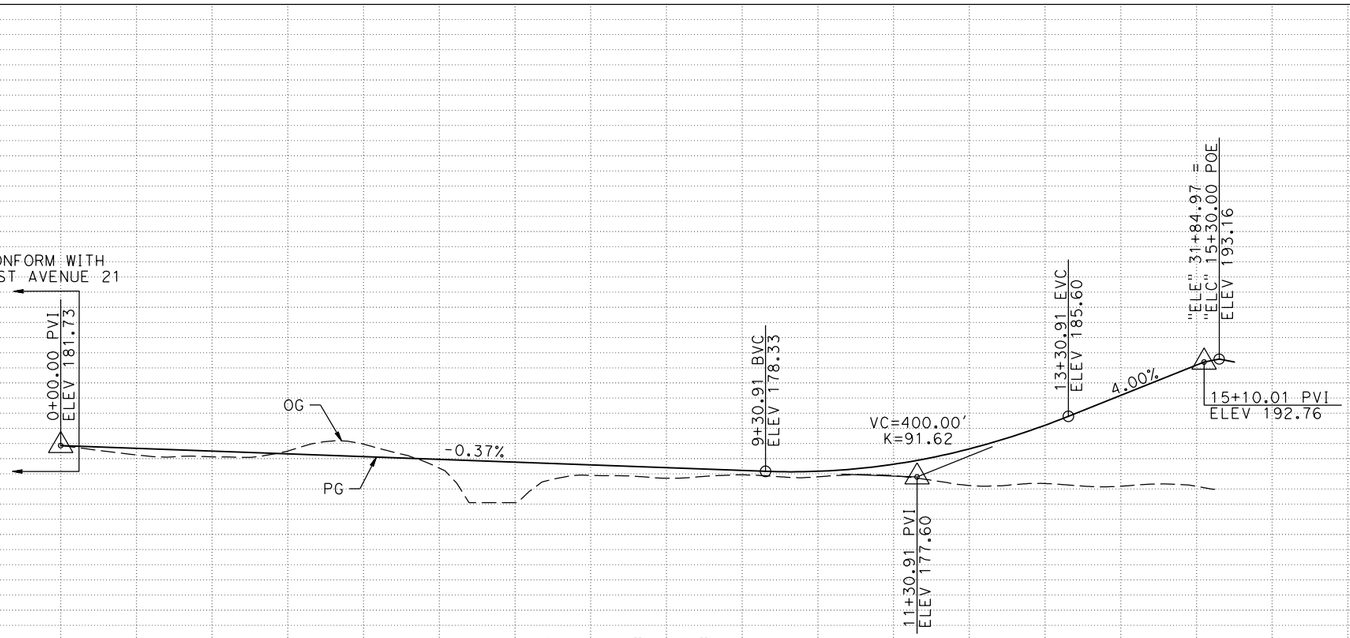

### PLAN

NOTE:

1. SEE DRAWINGS CT1929 AND CT1930 FOR DETAILS OF ROAD 11 "ELE" LINE.

10 0 10 20
VERT: 1"=10'

100 0 100 200
HORIZ: 1"=100'




### PROFILE "ELC" LINE

| | | 0+00 | 5+00 | 10+00 | 15+00 | TOTAL |
|---|---|---|---|---|---|---|
| STATION | | | | | | |
| CY | EXC | | | | | |
| | EMB | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. S. M.
DRAWN BY R. BROWNE
CHECKED BY M. SANTOS
IN CHARGE D. WEMMER
DATE 4/15/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

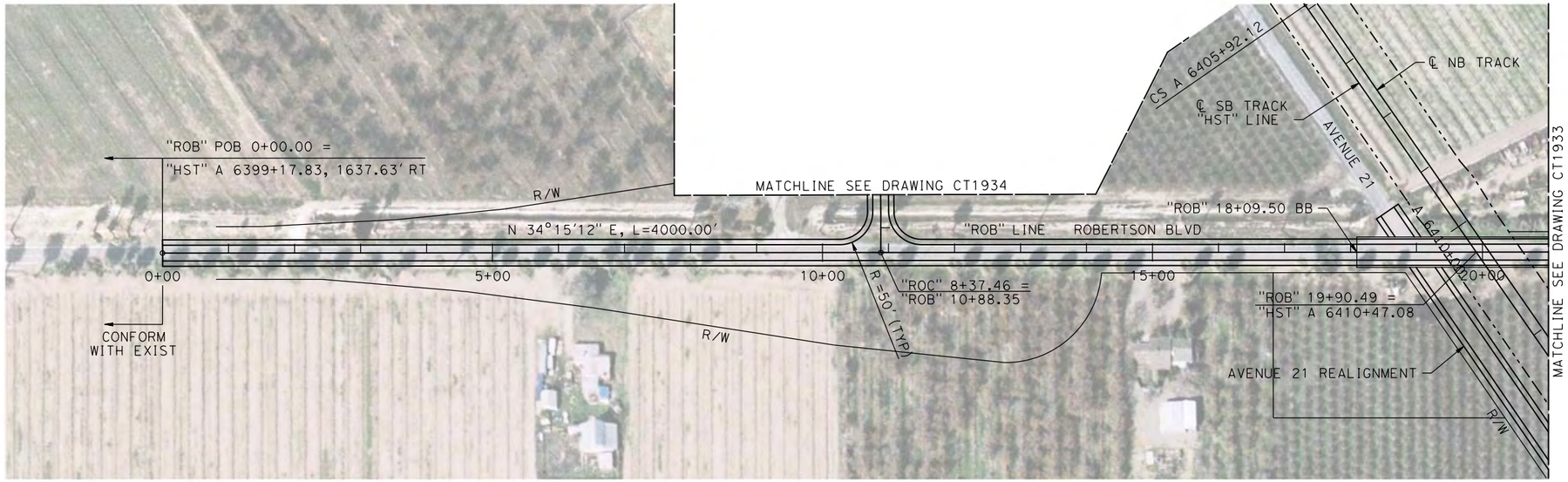
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 11 GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1931
SCALE AS NOTED
SHEET NO.

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## MADERA COUNTY



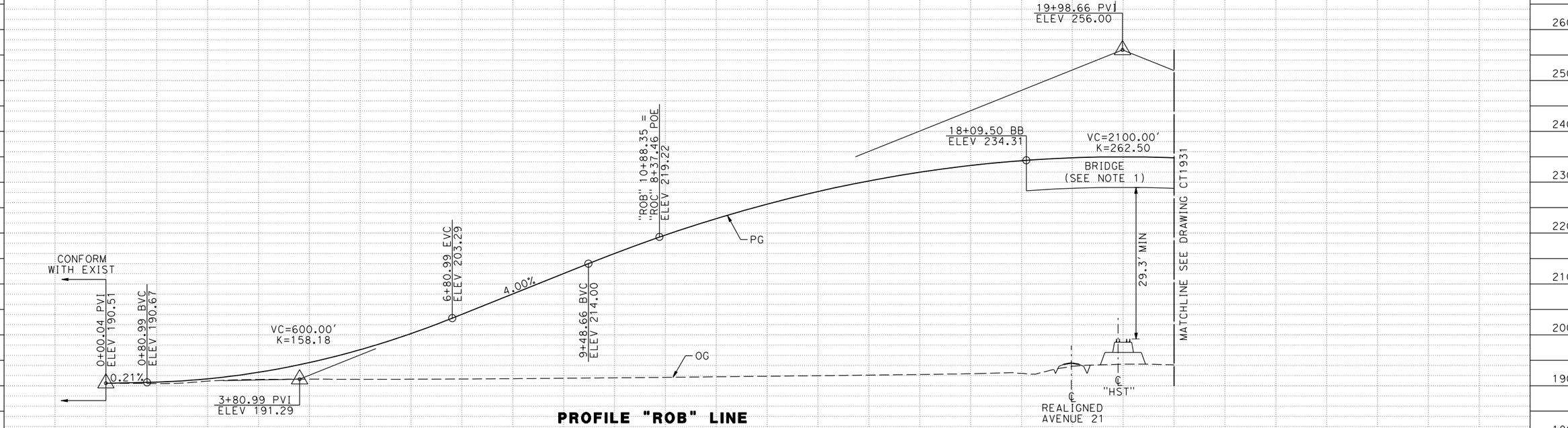

PLAN

NOTE:

1. FOR DETAILS OF ROBERTSON BLVD BRIDGE SEE STRUCTURE, VIADUCT, AND TUNNEL PLANS.
2. SEE DRAWING CT1934 FOR DETAILS OF ROBERTSON BLVD TO AVENUE 21 CONNECTOR ROAD "ROB" LINE.

10 0 10 20
VERT: 1"=10'

100 0 100 200
HORIZ: 1"=100'




PROFILE "ROB" LINE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. S. M.
DRAWN BY R. BROWNE
CHECKED BY M. SANTOS
IN CHARGE D. WEMMER
DATE 4/15/2011

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PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

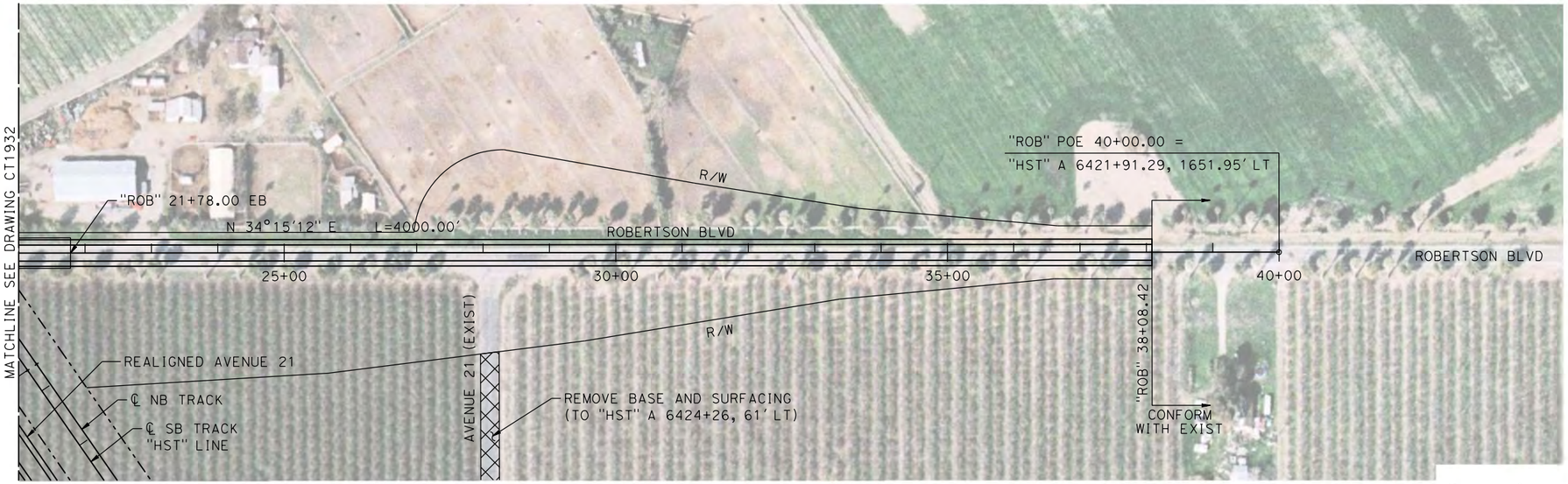
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROBERTSON BLVD GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1932
SCALE AS NOTED
SHEET NO.

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## MADERA COUNTY



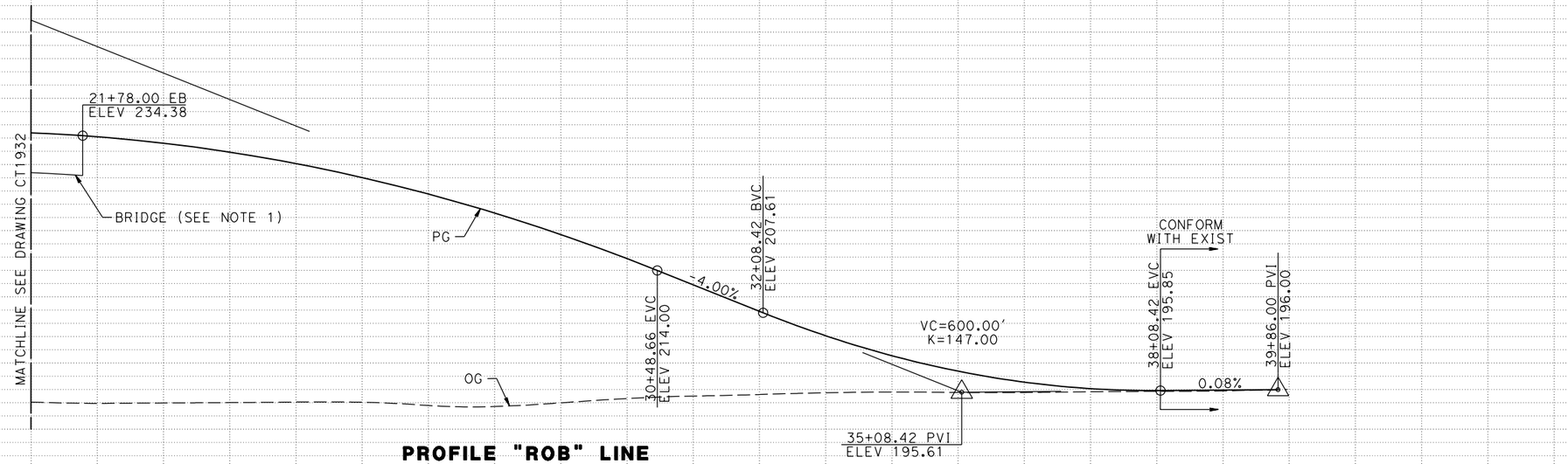

**PLAN**

NOTE:

1. FOR DETAILS OF ROBERTSON BLVD BRIDGE SEE STRUCTURE, VIADUCT AND TUNNEL PLANS.

10 0 10 20 — VERT: 1"=10'

100 0 100 200 — HORIZ: 1"=100'




**PROFILE "ROB" LINE**

| | | 25+00 | 30+00 | 35+00 | 40+00 | TOTAL |
|---|---|---|---|---|---|---|
| CY | EXC | | | | | |
| | EMB | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. S. M.
DRAWN BY R. BROWNE
CHECKED BY M. SANTOS
IN CHARGE D. WEMMER
DATE 4/15/2011

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PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

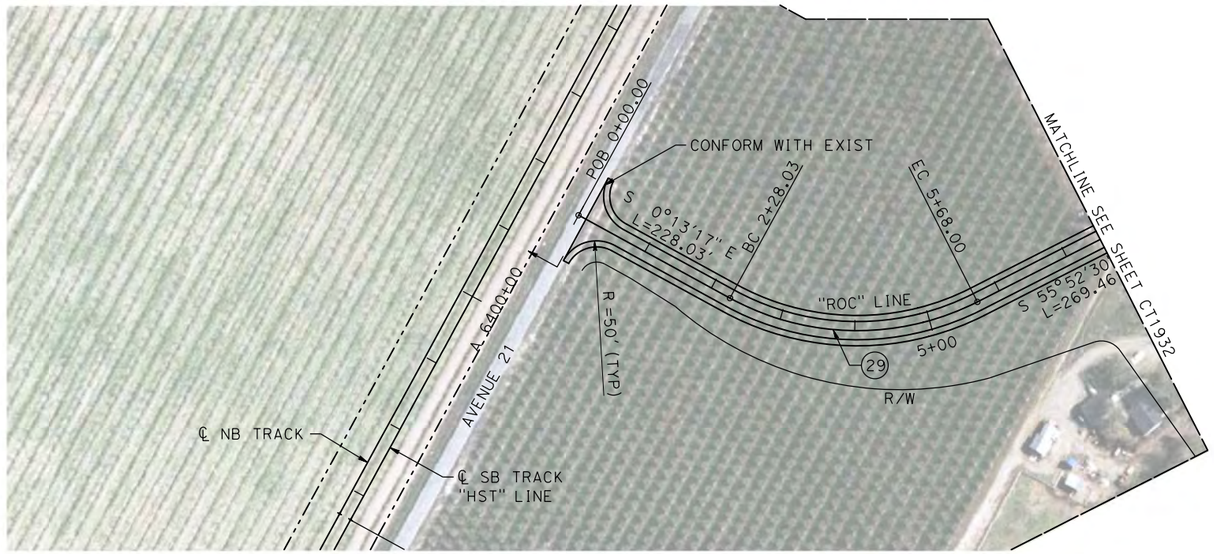
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROBERTSON BLVD GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1933
SCALE AS NOTED
SHEET NO.

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**MADERA COUNTY**



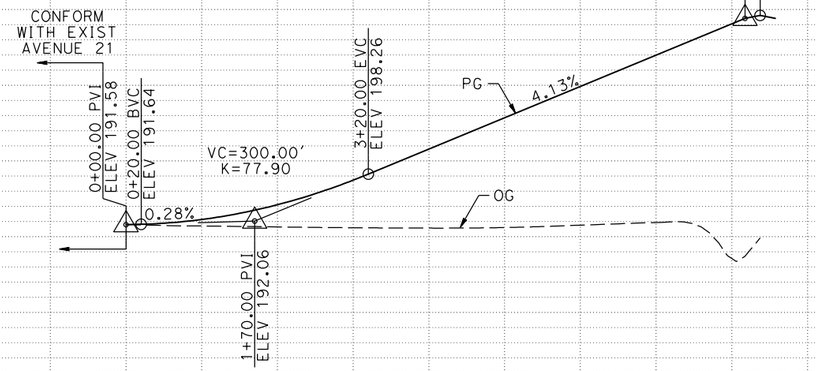

**PLAN**

NOTE:

1. SEE DRAWINGS CT1932 AND CT1933 FOR DETAILS OF ROBERTSON BLVD "ROB" LINE.

10 0 10 20
VERT: 1"=10'

100 0 100 200
HORIZ: 1"=100'




**PROFILE "ROC" LINE**

| STATION | 0+00 | 5+00 | 10+00 | TOTAL |
|---|---|---|---|---|
| CY EXC | | | | |
| CY EMB | | | | |

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CHECKED BY M. SANTOS
IN CHARGE D. WEMMER
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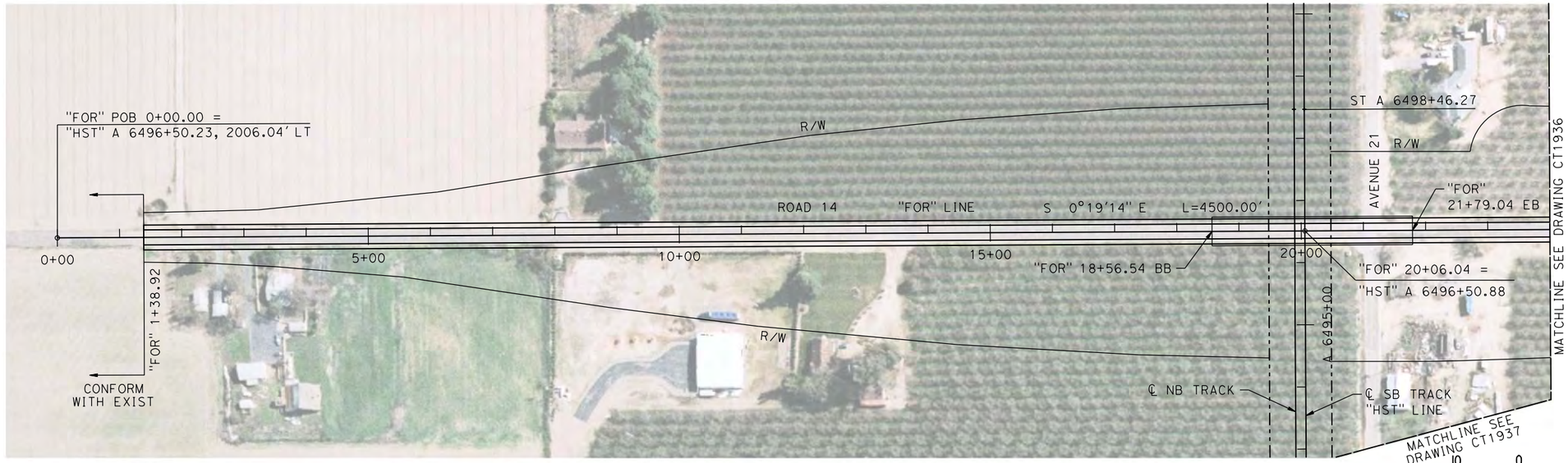
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROBERTSON BLVD GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1934
SCALE AS NOTED
SHEET NO.

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## MADERA COUNTY




PLAN

VERT: 1"=10'

HORIZ: 1"=100'

NOTE:

1. FOR DETAILS OF ROAD 14 BRIDGE SEE STRUCTURE, VIADUCT, AND TUNNEL PLANS.




PROFILE "FOR" LINE

| | | 0+00 | 5+00 | 10+00 | 15+00 | 20+00 | TOTAL |
|---|---|---|---|---|---|---|---|
| STATION | | | | | | | |
| CY | EXC | | | | | | |
| | EMB | | | | | | |

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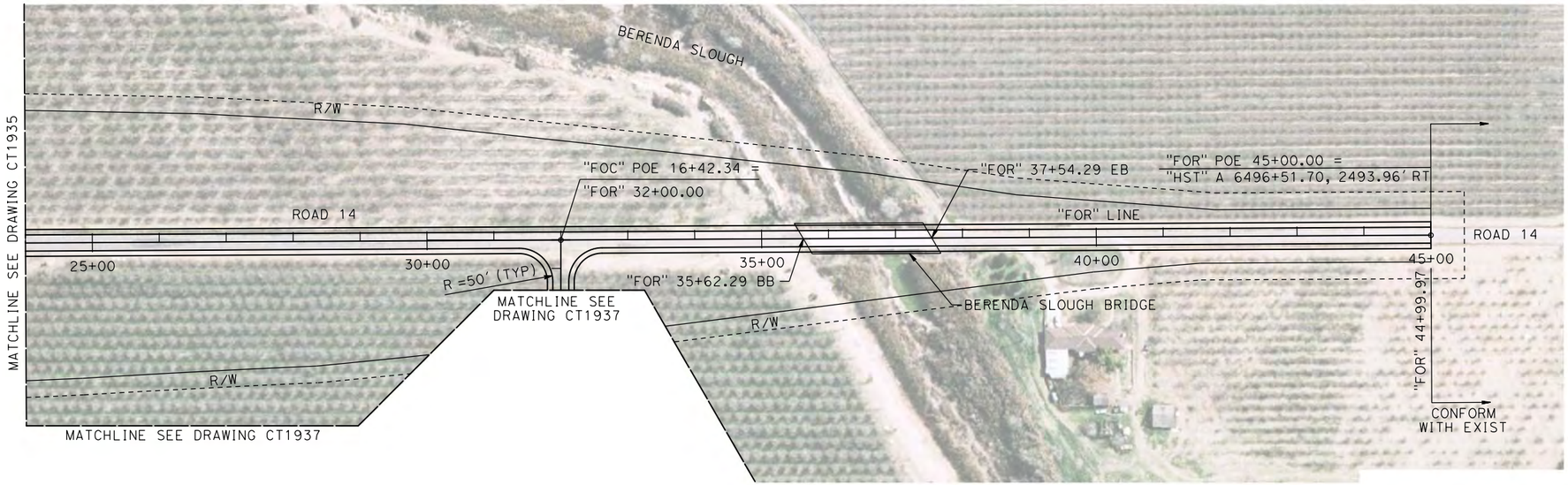
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 14 GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1935
SCALE AS NOTED
SHEET NO.

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## MADERA COUNTY



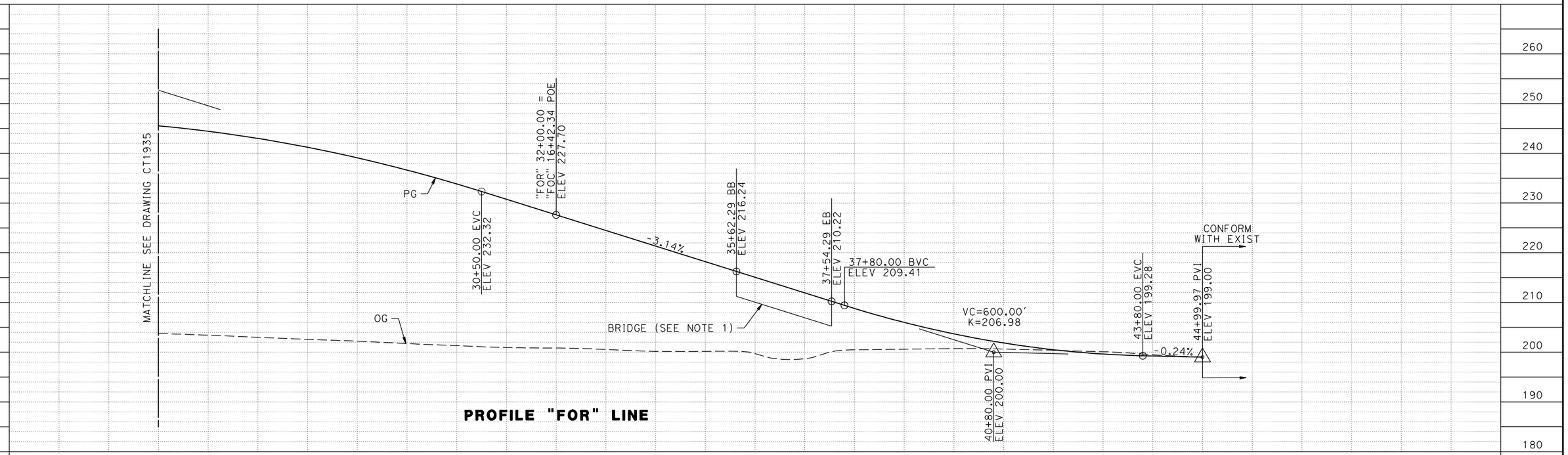

NOTE:

1. FOR BERENDA SLOUGH BRIDGE SEE STRUCTURE, VIADUCT, AND TUNNEL PLANS.
2. SEE DRAWING CT1937 FOR DETAILS OF ROAD 14 TO AVENUE 21 CONNECTOR ROAD "FOC" LINE.

**PLAN**

10 0 10 20
VERT: 1"=10'

100 0 100 200
HORIZ: 1"=100'




**PROFILE "FOR" LINE**

| STATION | 25+00 | 30+00 | 35+00 | 40+00 | 45+00 | TOTAL |
|---|---|---|---|---|---|---|
| CY EXC | | | | | | |
| CY EMB | | | | | | |

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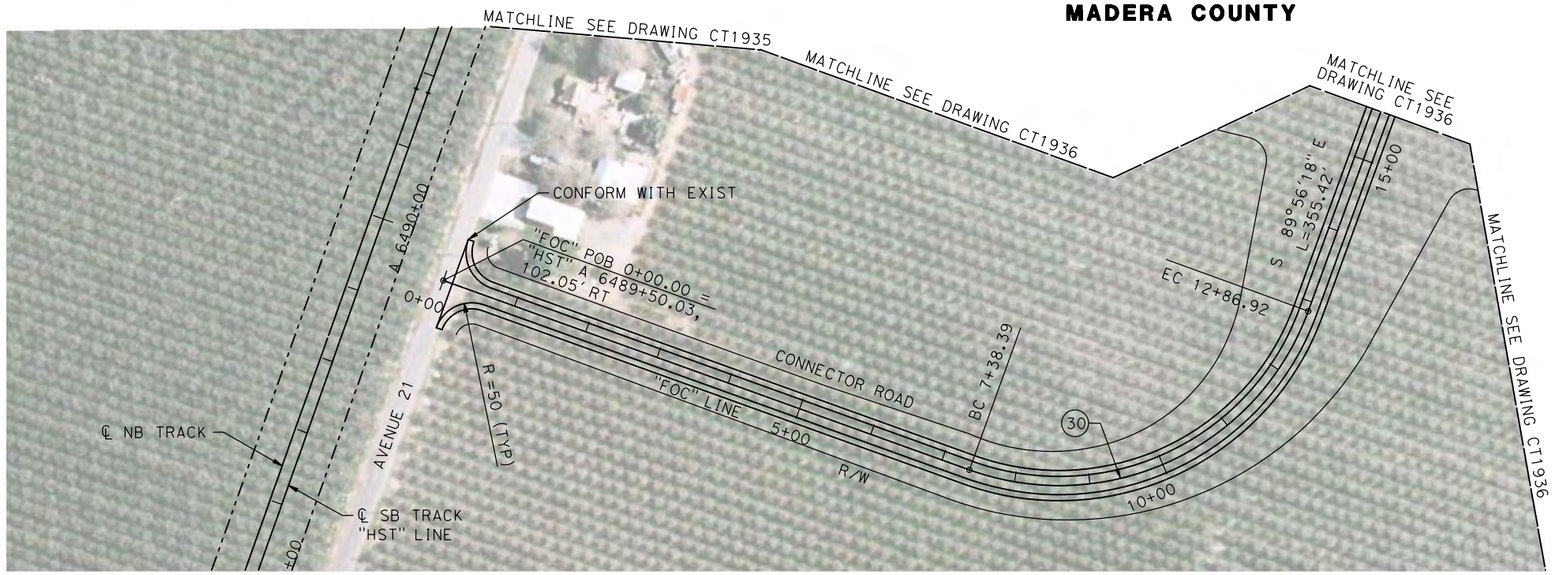
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 14 GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1936
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## MADERA COUNTY



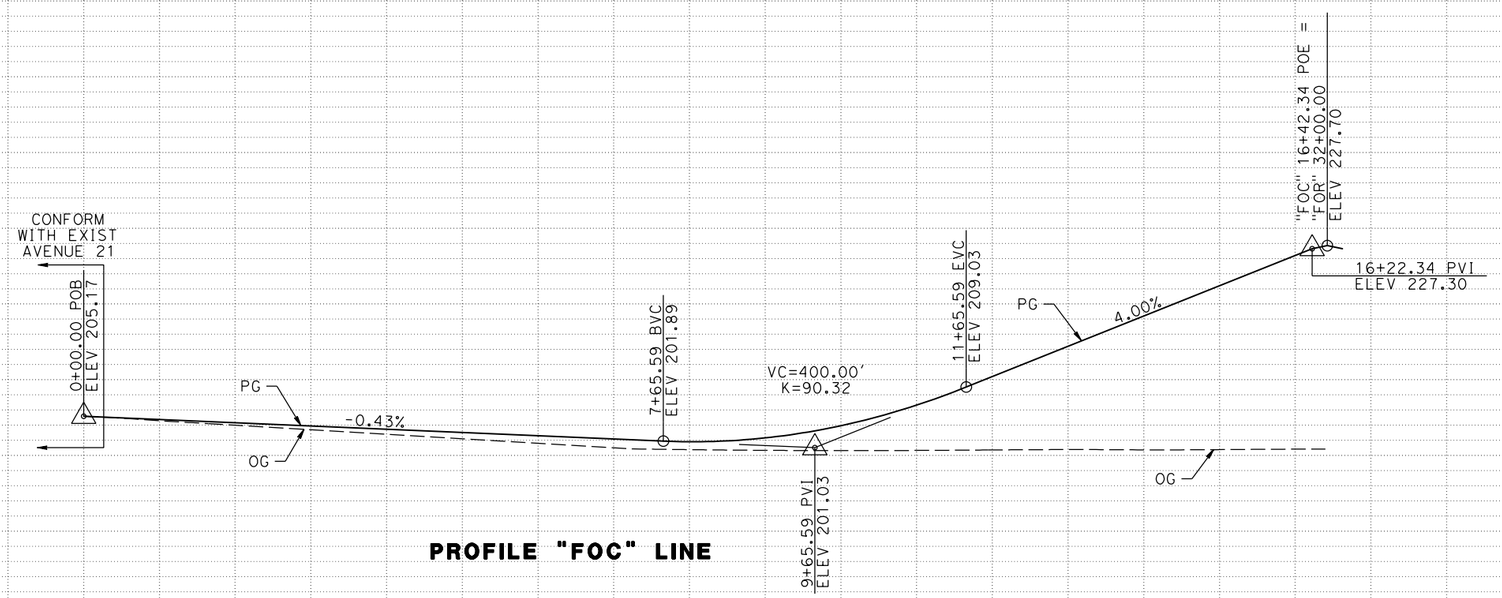

PLAN

NOTE:

1. SEE DRAWINGS CT1935 AND CT1936 FOR DETAILS OF ROAD 14 "FOR" LINE.

10 0 10 20
VERT: 1"=10'

100 0 100 200
HORIZ: 1"=100'




PROFILE "FOC" LINE

| STATION | 0+00 | 5+00 | 10+00 | 15+00 | TOTAL |
|---|---|---|---|---|---|
| CY EXC | | | | | |
| CY EMB | | | | | |

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# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 21
PLAN AND PROFILE
ROAD 14 GRADE SEPARATION

CONTRACT NO. HSR08-05
DRAWING NO. CT1937
SCALE AS NOTED
SHEET NO.

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p0039764

| LOCATION NO. | SHT NO. | DWG NO. | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | DRAWING TITLE LINE 5 | DRAWING TITLE LINE 6 |
|---|---|---|---|---|---|---|
| GENERAL | | | | | | |
| | | B0110-A | BNSF - AVE 21 WYE | GENERAL | INDEX OF DRAWINGS | SHEET 1 OF 1 |
| | | B0112-A | BNSF - AVE 21 WYE | GENERAL | ABBREVIATIONS, SYMBOLS & NOTES | SHEET 1 OF 1 |
| | | B0115-A | BNSF - AVE 21 WYE | | INDEX MAP | SHEET 1 OF 4 |
| | | B0116-A | BNSF - AVE 21 WYE | | INDEX MAP | SHEET 2 OF 4 |
| | | B0119-A | BNSF - AVE 21 WYE | ALTERNATIVES NO.1, NO.2, NO.3 | INDEX MAP | SHEET 3 OF 4 |
| | | B0120-A | BNSF - AVE 21 WYE | ALTERNATIVES NO.1, NO.2, NO.3 | INDEX MAP | SHEET 4 OF 4 |
| | | CT0121-A | BNSF - AVE 21 WYE | TYPICAL CROSS SECTIONS | GRADE SEPARATIONS | SHEET 1 OF 2 |
| | | CT0122-A | BNSF - AVE 21 WYE | TYPICAL CROSS SECTIONS | GRADE SEPARATIONS | SHEET 2 OF 2 |
| | | CT5000-A | BNSF - AVE 21 WYE | GENERAL STAGE CONSTRUCTION & TRAFFIC HANDLING APPROACH | | SHEET 1 OF 2 |
| | | CT5000-B | BNSF - AVE 21 WYE | GENERAL STAGE CONSTRUCTION & TRAFFIC HANDLING APPROACH | | SHEET 2 OF 2 |
| A1 - AVE 21 WYE (LAYOUT) | | | | | | |
| 43 | | CT2001-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 8 | LAYOUT | SHEET 1 OF 3 |
| 43 | | CT2002-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 8 | LAYOUT | SHEET 2 OF 3 |
| 43 | | CT2003-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 8 | LAYOUT | SHEET 3 OF 3 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| A1 - AVE 21 WYE (SUPERELEVATION TEMPLATES) | | | | | | |
| | | CT0996-A | BNSF - AVE 21 WYE | GRADE SEPARATION | SUPERELEVATION TEMPLATE | SHEET 1 OF 4 |
| | | CT0997-A | BNSF - AVE 21 WYE | GRADE SEPARATION | SUPERELEVATION TEMPLATE | SHEET 2 OF 4 |
| | | CT0998-A | BNSF - AVE 21 WYE | GRADE SEPARATION | SUPERELEVATION TEMPLATE | SHEET 3 OF 4 |
| | | CT0999-A | BNSF - AVE 21 WYE | GRADE SEPARATION | SUPERELEVATION TEMPLATE | SHEET 4 OF 4 |
| A1 - AVE 21 WYE (PROFILES) | | | | | | |
| 43 | | CT3001-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 8 | PROFILE | SHEET 1 OF 3 |
| 43 | | CT3002-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 8 | PROFILE | SHEET 2 OF 3 |
| 43 | | CT3003-A | BNSF MAIN LINE - AVE 21 WYE | GRADE SEPARATION - AVENUE 8 | PROFILE | SHEET 3 OF 3 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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|---|---|---|---|---|---|
| 2 | 02/24/2012 | RG | | | |
| 1 | 12/12/2011 | RG | | | |

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21
GENERAL
INDEX OF DRAWINGS
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. B0110-A
SCALE NONE
SHEET NO. ### OF ###

# ABBREVIATIONS

## ALIGNMENT

HORIZONTAL

| | |
|---|---|
| BC | BEGINNING OF CURVE |
| EC | END OF CURVE |
| PC | POINT OF CURVE |
| PI | POINT OF INTERSECTION OF TWO TANGENTS |
| POC | POINT ON CURVE |
| POT | POINT ON TANGENT |
| PRC | POINT OF REVERSE CURVES |
| PT | POINT OF TANGENCY |
| R | RADIUS OF CURVATURE IN FEET |
| V, DS | VELOCITY, DESIGN SPEED |

VERTICAL

| | |
|---|---|
| PVC | POINT OF VERTICAL CURVE (BEGINNING OF CURVE) |
| PVI | POINT OF VERTICAL INTERSECTION (OF TANGENTS) |
| PVT | POINT OF VERTICAL TANGENCY (ENDING OF CURVE) |
| VC | VERTICAL CURVE |

## MISCELLANEOUS

| | |
|---|---|
| BEG | BEGIN |
| BLVD | BOULEVARD |
| ℄ | CENTER LINE |
| CL | CENTERLINE, CLASS |
| CLR | CLEAR |
| COL | COLUMN |
| DWG | DRAWING |
| EQ | EQUATION |
| EXIST(E) | EXISTING |
| IN | INCH |
| LT | LEFT |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| N | NORTH |
| NB | NORTH BOUND |
| NTS | NOT TO SCALE |
| OG | ORIGINAL GROUND |
| O/H OH | OVERHEAD |
| PG&E | PACIFIC GAS & ELECTRIC |
| PGL, FG | PROFILE GRADE LINE |
| RR | RAILROAD |
| RD | ROAD |
| R/W | RIGHT OF WAY |
| RT | RIGHT |
| SS | SANITARY SEWER |
| SHT | SHEET |
| ST | STREET |
| STD | STANDARD |
| SD | STORM DRAIN |
| STRUCT, STR | STRUCTURE |
| T | TELEPHONE |
| TOR | TOP OF RAIL |
| TK | TRACK |
| TYP | TYPICAL |
| TBD | TO BE DETERMINED |
| TF | TELECOMMUNICATIONS FIBER OPTIC |
| V VERT | VERTICAL |
| W | WATER, WEST |

# SYMBOLS

MATCH LINE

HST TRACK

PROPOSED HST RIGHT-OF-WAY

FREIGHT/PASSENGER TRACK - EXISTING

EXISTING RIGHT-OF-WAY OR EXISTING BRIDGE FEATURES

RETAINING WALLS

ORIGINAL GROUND

G16 — GAS LINE (16")

TC — COMMUNICATION LINE

W — WATER LINE

FO — FIBER OPTIC LINE

E — ELECTRICAL LINE

ELECTRICAL TOWER

S — SEWER LINE

SD — STORM DRAIN LINE

O — FUEL LINE

TC — TELEPHONE LINE

P12 — PETROLEUM LINE (12")

(OH) — OVERHEAD

NORTH ARRROW

PVI

(UG) — UNDERGROUND LINE

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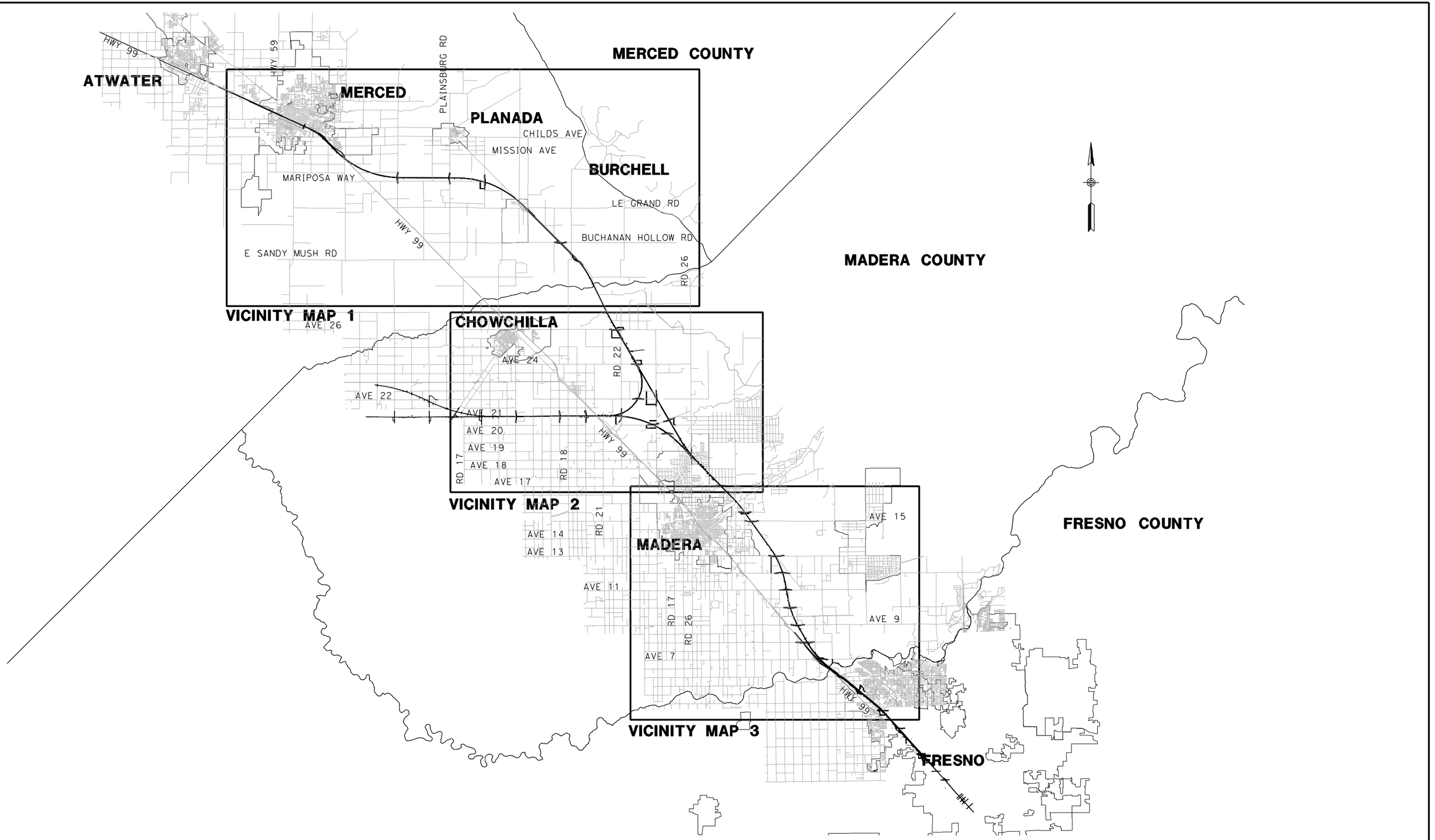
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**MERCED TO FRESNO**
BNSF - AVE 21 WYE
GENERAL
ABBREVIATIONS, SYMBOLS & NOTES
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. B0112-A
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# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE

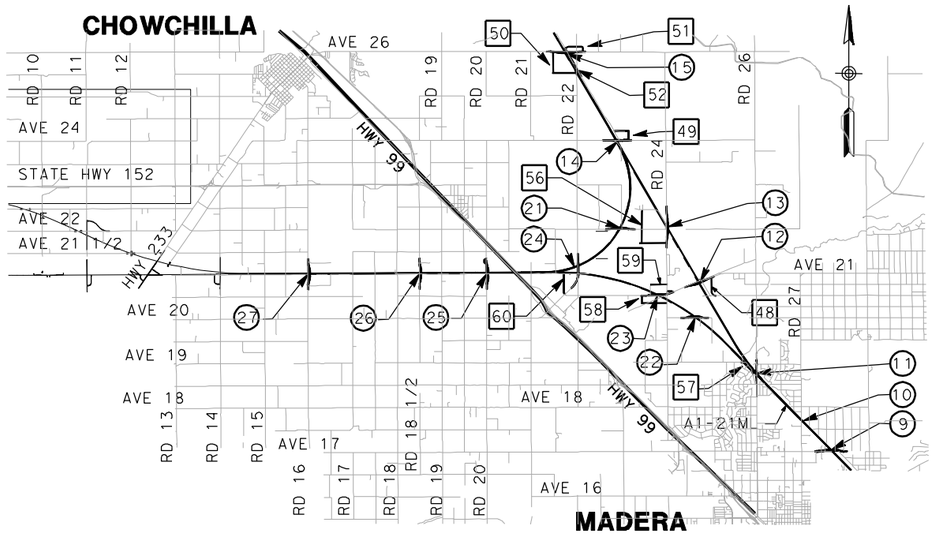
INDEX MAP
SHEET 1 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. B0115-A
SCALE NO SCALE
SHEET NO. OF ###

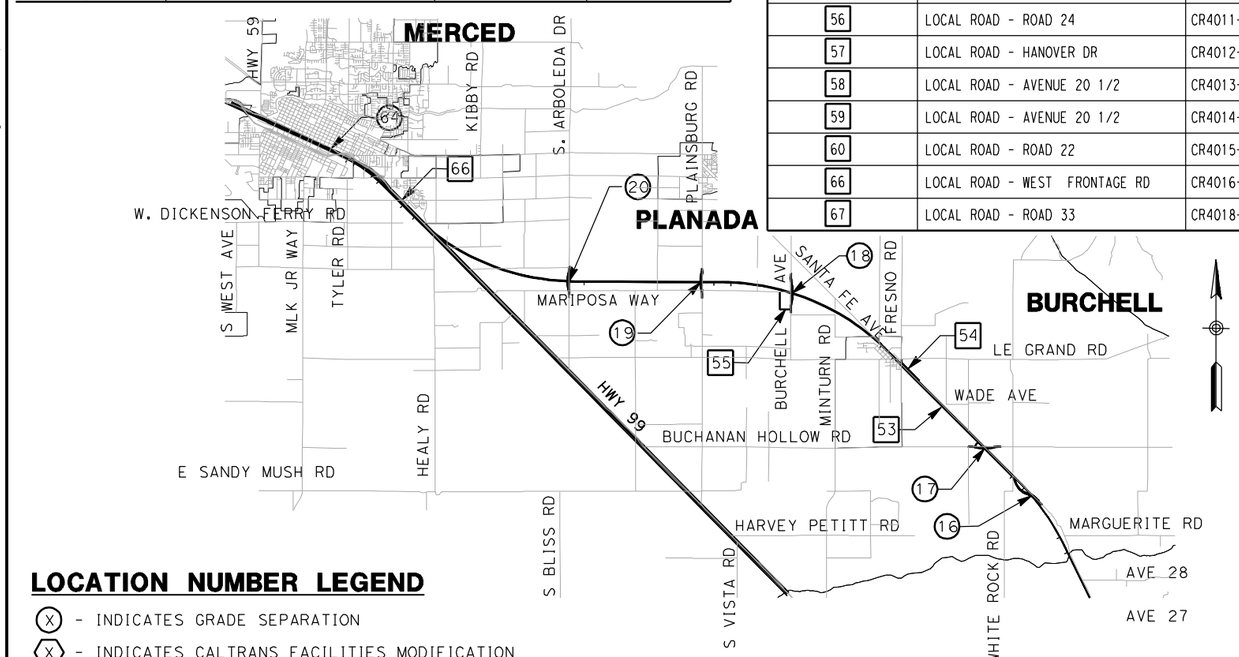
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| LOCATION NO. | SHEET TITLE | ROADWAY DWG NO. | STRUCTURE DWG NO. |
|---|---|---|---|
| (1) | GRADE SEPARATION - AVENUE 9 | CT0001-A - CT0003-A | ST1001 |
| (2) | GRADE SEPARATION - AVENUE 10 | CT0004-A - CT0006-A | ST1002 |
| (3) | GRADE SEPARATION - AVENUE 11 | CT0007-A - CT0009-A | ST1003 |
| (4) | GRADE SEPARATION - AVENUE 12 | CT0010-A - CT0012-A | ST1004 |
| (5) | GRADE SEPARATION - AVENUE 13 | CT0013-A - CT0016-A | ST1005 |
| (6) | GRADE SEPARATION - AVENUE 15 | CT0017-A - CT0019-A | ST1006 |
| (7) | GRADE SEPARATION - AVENUE 15 1/2 | CT0020-A - CT0022-A | ST1007 |
| | | | |
| (9) | GRADE SEPARATION - AVENUE 17 | CT0026-A - CT0028-A | ST1009 |
| (11) | UNDERPASS - ROAD 26 | CT0032-A - CT0034-A | ST1011 |
| (12) | GRADE SEPARATION - AVENUE 21 | CT0035-A - CT0037-A | ST1012 |
| (13) | GRADE SEPARATION - ROAD 24 | CT0038-A - CT0040-A | ST1013 |
| (14) | UNDERPASS - AVENUE 24 | CT0041-A - CT0043-A | ST1014 |
| (15) | GRADE SEPARATION - AVENUE 26 | CT0044-A - CT0047-A | ST1015 |
| (16) | GRADE SEPARATION - SANTA FE AVE | CT0048-A - CT0050-A | ST1016 |
| (17) | GRADE SEPARATION - BUCHANAN HOLLOW | CT0051-A - CT0053-A | ST1017 |
| (18) | GRADE SEPARATION - BURCHELL AVE | CT0054-A - CT0056-A | ST1018 |
| (19) | GRADE SEPARATION - PLAINSBURG RD | CT0057-A - CT0059-A | ST1019 |
| (20) | GRADE SEPARATION - ARBOLEDA DR | CT0060-A - CT0062-A | ST1020 |
| (21) | GRADE SEPARATION - AVENUE 22 | CT0063-A - CT0065-A | ST1021 |

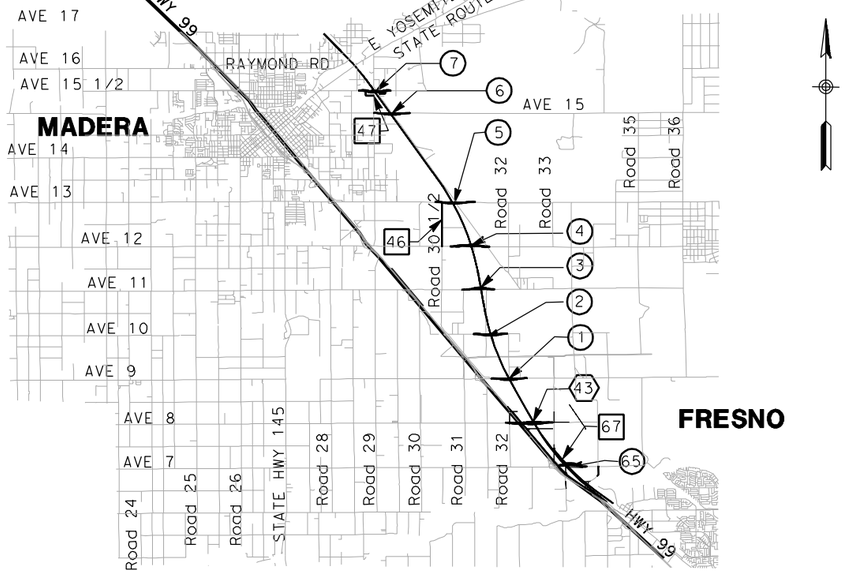
| LOCATION NO. | SHEET TITLE | ROADWAY DWG NO. | STRUCTURE DWG NO. |
|---|---|---|---|
| (22) | GRADE SEPARATION - AVENUE 20 | CT0066-A - CT0068-A | ST1022 |
| (23) | GRADE SEPARATION - AVENUE 20 1/2 | CT0069-A - CT0071-A | ST1023 |
| (24) | UNDERPASS - ROAD 22 | CT0073-A - CT0075-A | |
| (25) | GRADE SEPARATION - ROAD 20 | CT0076-A - CT0078-A | ST1026 |
| (26) | GRADE SEPARATION - ROAD 18 1/2 | CT0079-A - CT0081-A | ST1027 |
| (27) | GRADE SEPARATION - ROAD 16 | CT0082-A - CT0084-A | ST1028 |
| (64) | GRADE SEPARATION - G STREET | CT0149 | ST1180 |
| (65) | GRADE SEPARATION - AVENUE 7 | CT0146-A - CT0148-A | ST1070 |
| (43) | CALTRANS - AVENUE 8 | CT2000-A - CT2003-A | ST1000 |
| | | | |
| [46] | LOCAL ROAD - ROAD 30 1/2 | CR4000-A | |
| [47] | LOCAL ROAD - ROAD 29 | CR4001-A | |
| [48] | LOCAL ROAD - AVENUE 20 1/2 | CR4002-A | |
| [49] | LOCAL ROAD - SHARON | CR4003-A | |
| [50] | LOCAL ROAD - AVENUE 26 | CR4004-A | |
| [51] | LOCAL ROAD - AVENUE 26 | CR4005-A | |
| [52] | LOCAL ROAD - SANTA FE AVE | CR4006-A | |
| [53] | LOCAL ROAD - SANTA FE AVE | CR4007-A - CR4009-A | |
| [54] | LOCAL ROAD - SANTA FE AVE (SOUTH) | CR4009-A | |
| [55] | LOCAL ROAD - BURCHELL RD | CR4010-A | |
| [56] | LOCAL ROAD - ROAD 24 | CR4011-A | |
| [57] | LOCAL ROAD - HANOVER DR | CR4012-A | |
| [58] | LOCAL ROAD - AVENUE 20 1/2 | CR4013-A | |
| [59] | LOCAL ROAD - AVENUE 20 1/2 | CR4014-A | |
| [60] | LOCAL ROAD - ROAD 22 | CR4015-A | |
| [66] | LOCAL ROAD - WEST FRONTAGE RD | CR4016-A - CR4017-A | |
| [67] | LOCAL ROAD - ROAD 33 | CR4018-A | |




## VICINITY MAP 2




## VICINITY MAP 1




## VICINITY MAP 3

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

(X) - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

FOR ROADWAY STRUCTURES SEE STRUCTURAL INDEX MAPS

9000 0 9000 18000

GRAPHIC SCALE

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| 2 | 02/24/2012 | RG | | | |
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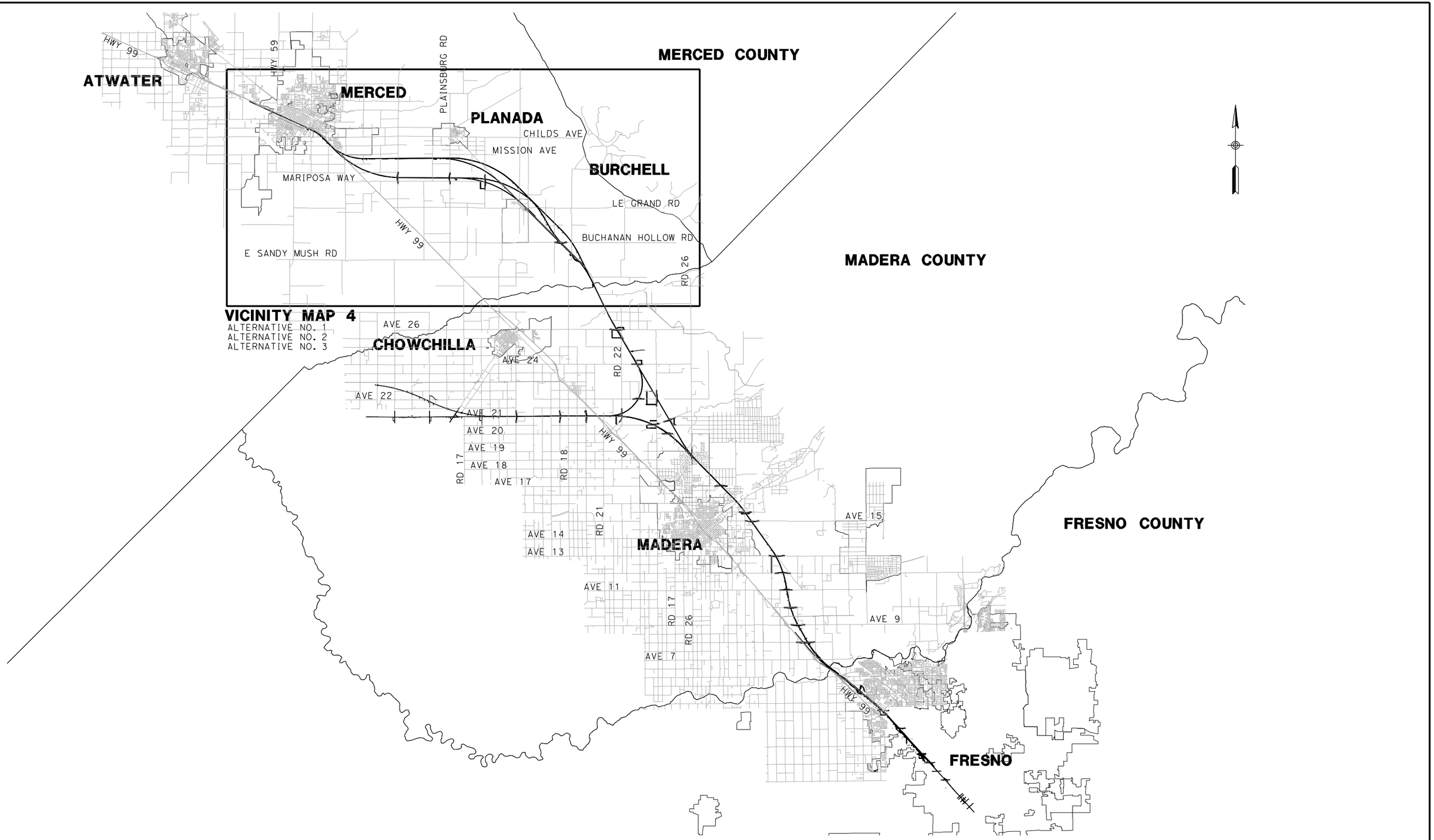
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF - AVE 21 WYE

INDEX MAP
SHEET 2 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. B0116-A
SCALE AS SHOWN
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**VICINITY MAP 4**
ALTERNATIVE NO. 1
ALTERNATIVE NO. 2
ALTERNATIVE NO. 3

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
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| 1 | 12/12/2011 | RG | | | |

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

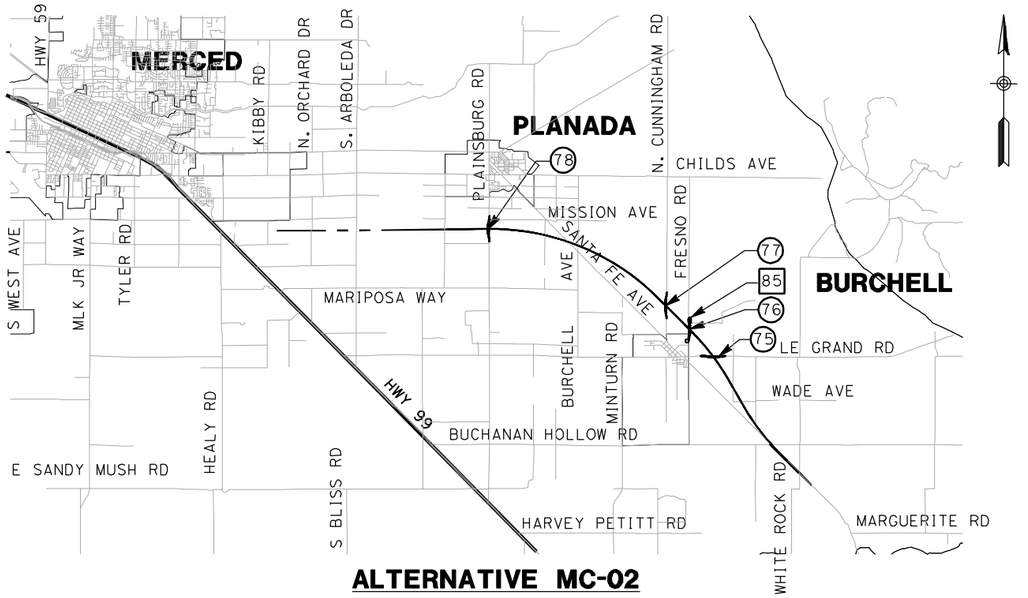
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE
MC - ALTERNATIVES NO. 1, NO. 2, & NO. 3

INDEX MAP
SHEET 3 OF 4

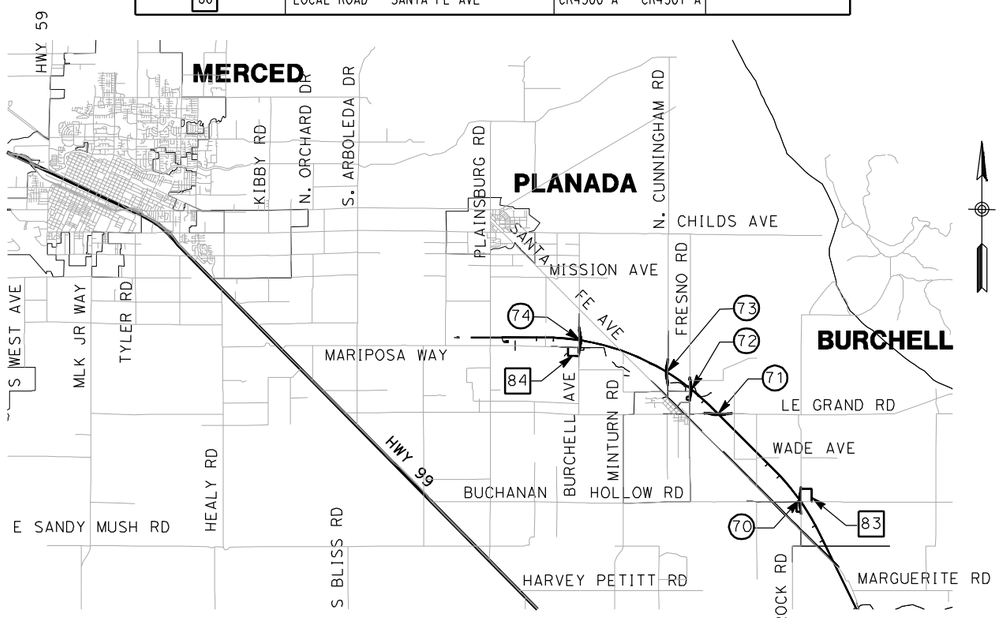
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DRAWING NO. B0119-A
SCALE NO SCALE
SHEET NO. ### OF ###

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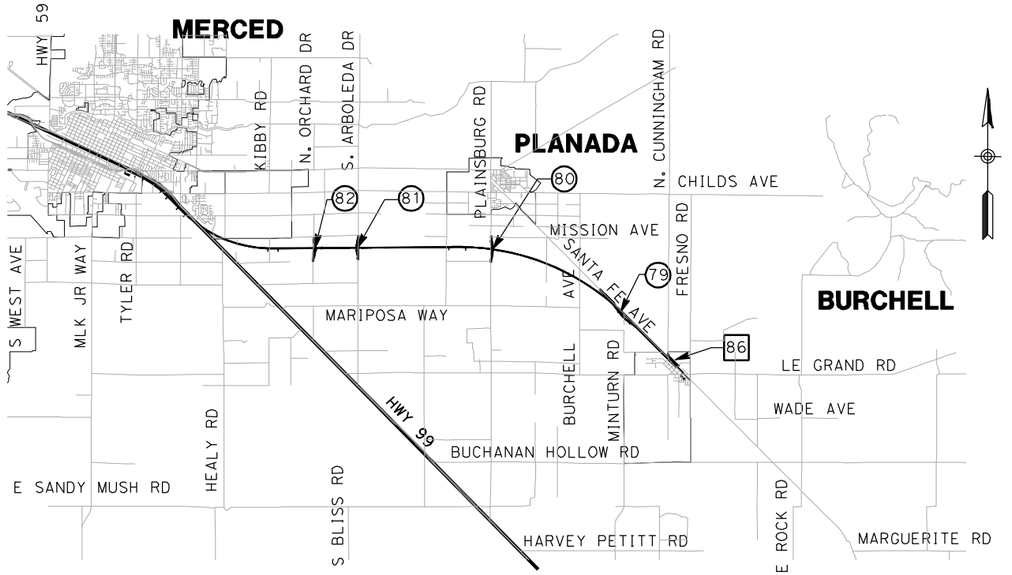
| LOCATION NO. | SHEET TITLE | ROADWAY DWG NO. | STRUCTURE DWG NO. |
|---|---|---|---|
| (70) | GRADE SEPARATION - WHITE ROCK RD | CT0200-A - CT0202-A | ST1050 |
| (71) | GRADE SEPARATION - LE GRAND RD | CT0203-A - CT0205-A | ST1051 |
| (72) | GRADE SEPARATION - S. FRESNO RD | CT0206-A - CT0208-A | ST1052 |
| (73) | GRADE SEPARATION - S. CUNNINGHAM RD | CT0209-A - CT0211-A | ST1053 |
| (74) | GRADE SEPARATION - S. BURCHELL AVE | CT0212-A - CT0214-A | ST1054 |
| (75) | GRADE SEPARATION - LE GRAND RD | CT0250-A - CT0252-A | ST1055 |
| (76) | GRADE SEPARATION - S. FRESNO RD | CT0253-A - CT0255-A | ST1056 |
| (77) | GRADE SEPARATION - S. CUNNINGHAM RD | CT0256-A - CT0258-A | ST1057 |
| (78) | GRADE SEPARATION - PLAINSBURG RD | CT0259-A - CT0261-A | ST1058 |
| (79) | GRADE SEPARATION - S. SANTA FE AVE | CT0300-A - CT0302-A | ST1059 |
| (80) | GRADE SEPARATION - PLAINSBURG RD | CT0303-A - CT0305-A | ST1060 |
| (81) | GRADE SEPARATION - S. ARBOLEDA RD | CT0306-A - CT0308-A | ST1061 |
| (82) | GRADE SEPARATION - S. ORCHARD DR | CT0309-A - CT0311-A | ST1062 |
| [83] | LOCAL ROAD - WHITE ROCK RD | CR4200-A - CR4201-A | |
| [84] | LOCAL ROAD - BURCHELL AVE | CR4202-A | |
| [85] | LOCAL ROAD - FRESNO RD | CR4255-A | |
| [86] | LOCAL ROAD - SANTA FE AVE | CR4300-A - CR4301-A | |




**ALTERNATIVE MC-02**




**ALTERNATIVE MC-01**




**ALTERNATIVE MC-03**

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

⟨X⟩ - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

FOR ROADWAY STRUCTURES SEE STRUCTURAL INDEX MAPS

9000 0 9000 18000

GRAPHIC SCALE

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY T. WALTZ
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
MC - ALTERNATIVES NO. 1, NO. 2, & NO. 3

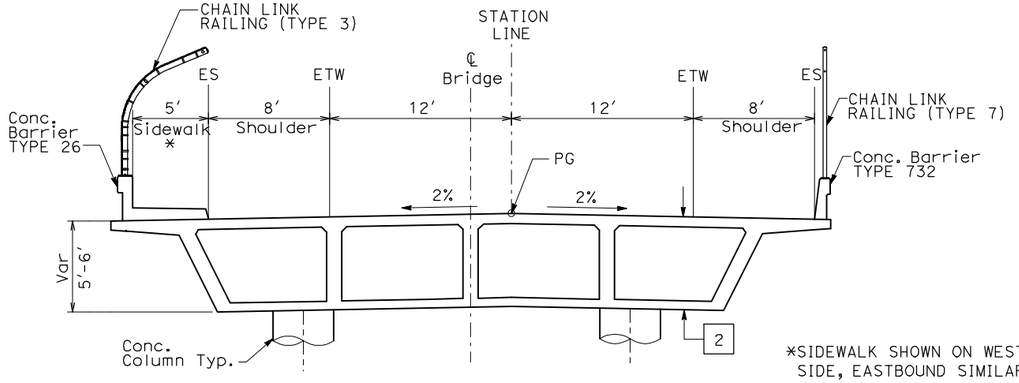
INDEX MAP
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. B0120-A
SCALE NO SCALE
SHEET NO. ### OF ###

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NOTES:

1. DIMENSIONS OF EXISTING PAVEMENT WIDTHS ARE BASED ON MEASUREMENTS MADE IN THE FIELD AND ARE APPROXIMATE.
2. PAVEMENT SECTIONS ARE TO BE DETERMINED. GEOTECHNICAL INVESTIGATIONS WILL BE CONDUCTED IN A SUBSEQUENT PHASE TO DETERMINE STRUCTURAL SECTIONS FOR EACH CROSSING.
3. SPACING OF BENCHES ON PROPOSED FILL SECTIONS ARE TO BE DETERMINED.
4. RIGHT-OF-WAY (R/W) WIDTH IS FOR INFORMATION ONLY. EXACT WIDTH TO BE DETERMINED IN COORDINATION WITH AFFECTED AGENCY.



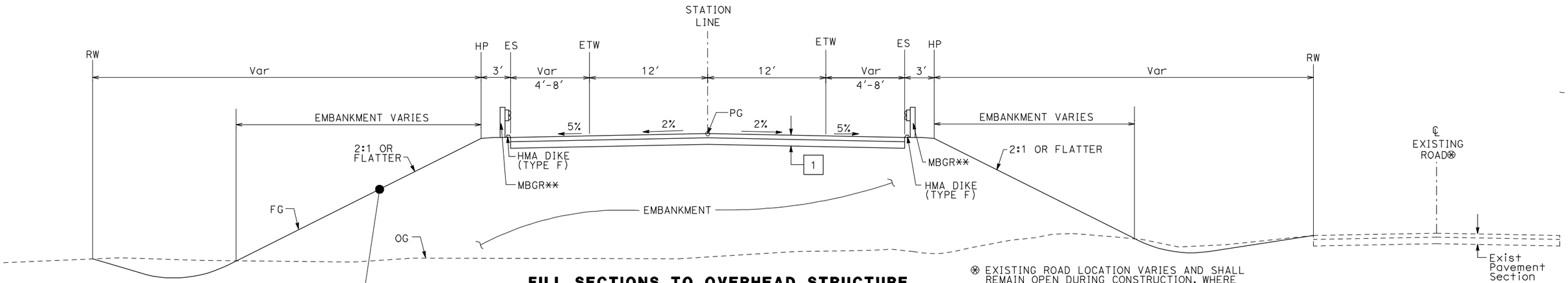

**OVERHEAD STRUCTURE**

SEE STRUCTURAL PLANS

*SIDEWALK SHOWN ON WESTBOUND SIDE, EASTBOUND SIMILAR SEE LAYOUT SHEETS FOR DETAILS.

STRUCTURAL SECTIONS:

1. HMA TYPE A
   AB CLASS 2
2. CAST IN PLACE / PRESTRESSED BOX GIRDER (6′ STRUCTURE DEPTH)
3. AB CLASS 2

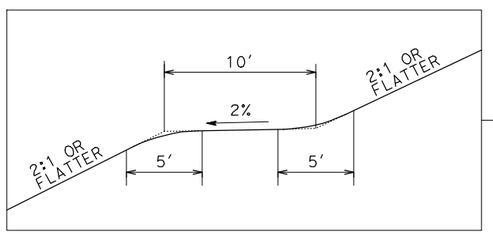



**FILL SECTIONS TO OVERHEAD STRUCTURE**

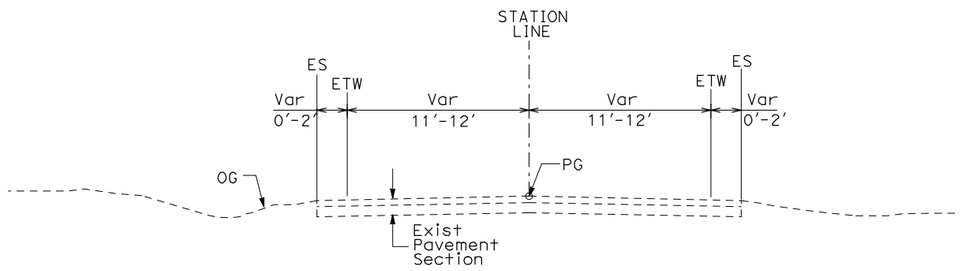
WEST SIDE SHOWN (EAST SIDE SIMILAR)

⊗ EXISTING ROAD LOCATION VARIES AND SHALL REMAIN OPEN DURING CONSTRUCTION. WHERE SHOWN ON THE PLAN CLOSE AND OBLITERATE EXISTING ROADWAY SUBSEQUENT TO CONSTRUCTION OF THE REALIGNED ROADWAY.

** EXACT LIMITS OF MBGR PER AGENCY REQUIREMENTS.




BENCHING DETAIL




**EXISTING LOCAL ROAD**

WEST SIDE SHOWN (EAST SIDE SIMILAR)

SEE LAYOUT SHEETS FOR ACTUAL ROADWAY WIDTHS AT EACH CROSSING

TYPICAL CROSS SECTIONS ON THIS SHEET APPLY TO THE FOLLOWING ROADWAYS FOR ALIGNMENT A1, AVE 21 WYE :

| NO. | STREET NAME | | |
|---|---|---|---|
| 1 | Avenue 8 | 1 | Avenue 8 |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY K. OAKS
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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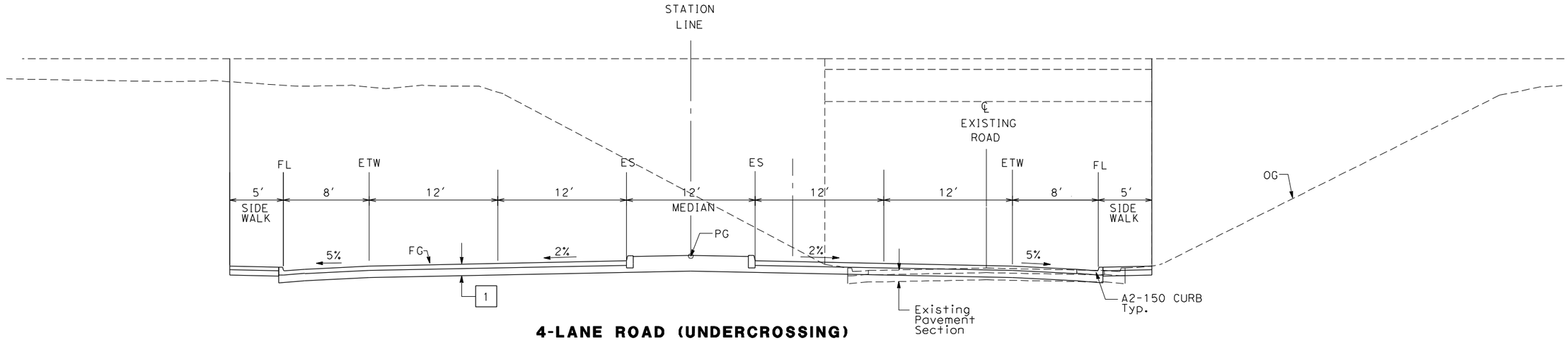
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Sacramento, CA 95811
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
TYPICAL CROSS SECTIONS
HIGHWAY
SHEET 1 OF 2

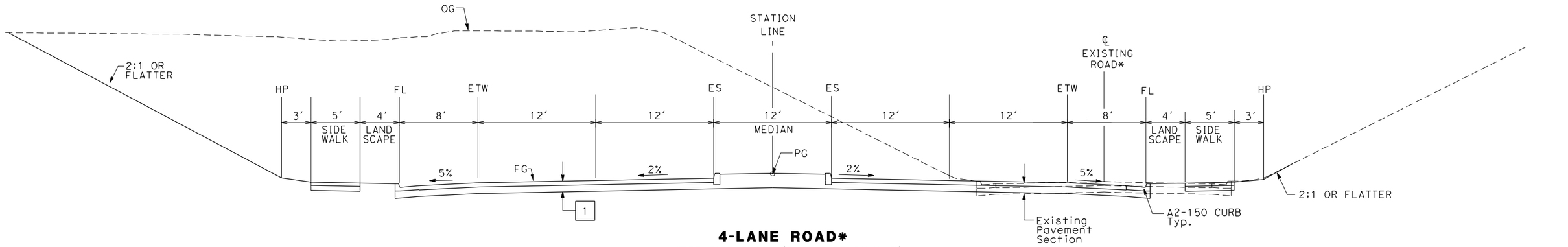
CONTRACT NO. HSR06-007
DRAWING NO. CT0121-A
SCALE NONE
SHEET NO. ### OF ###

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## 4-LANE ROAD (UNDERCROSSING)

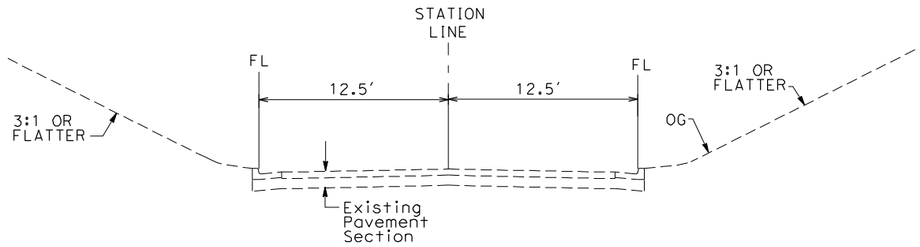
SEE STRUCTURAL PLANS




## 4-LANE ROAD*

WEST SIDE SHOWN (EAST SIDE SIMILAR)

* EXISTING ROAD LOCATION VARIES. CONSTRUCTION SHALL BE STAGED TO KEEP SR 145 OPEN DURING CONSTRUCTION.




## EXISTING SR 145

EAST SIDE SHOWN (WEST SIDE SIMILAR)

TYPICAL CROSS SECTIONS ON THIS SHEET APPLY TO THE FOLLOWING ROADWAYS FOR ALIGNMENT A1:

| NO. | STREET NAME |
|---|---|
| | |
| | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/12/2011 | RG | | | |

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IN CHARGE A. BOONE
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

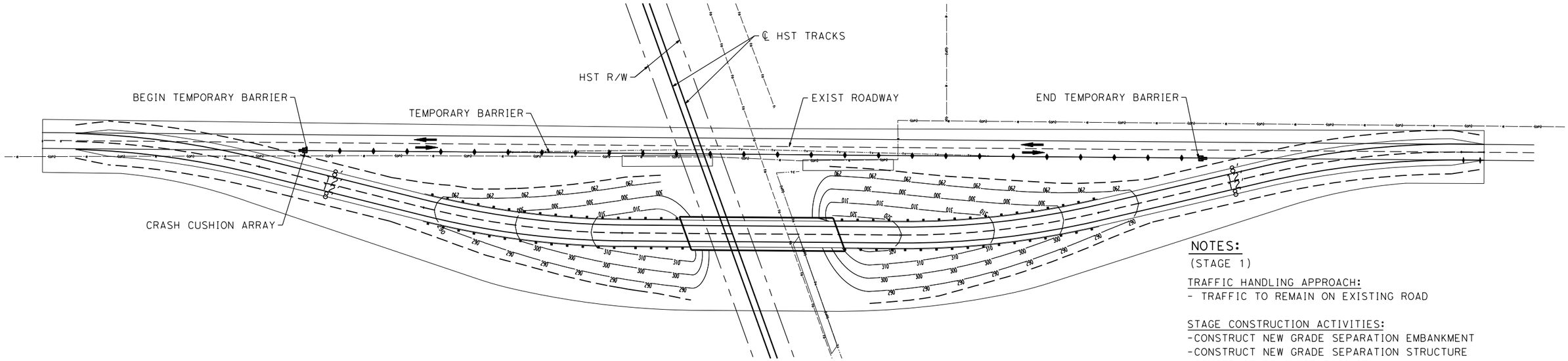
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF - AVE 21 WYE
TYPICAL CROSS SECTIONS
HIGHWAY
SHEET 2 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. CT0122-A
SCALE NONE
SHEET NO. ### OF ###

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DeMarcoF

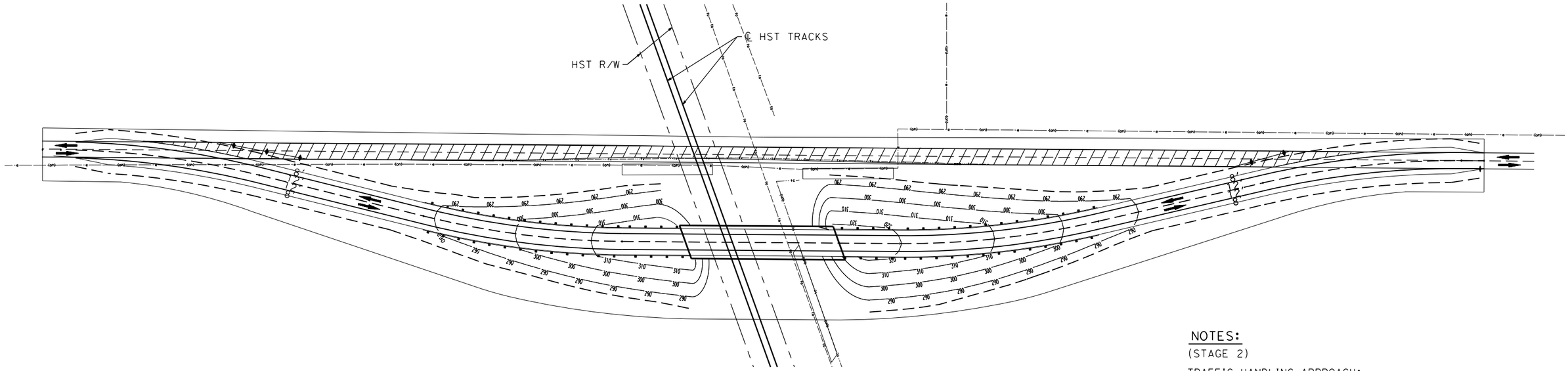



## STAGE CONSTRUCTION (STAGE 1)

NOTES:
(STAGE 1)

TRAFFIC HANDLING APPROACH:
- TRAFFIC TO REMAIN ON EXISTING ROAD

STAGE CONSTRUCTION ACTIVITIES:
-CONSTRUCT NEW GRADE SEPARATION EMBANKMENT
-CONSTRUCT NEW GRADE SEPARATION STRUCTURE
-CONSTRUCT DRAINAGE FACILITY




## STAGE CONSTRUCTION (STAGE 2)

NOTES:
(STAGE 2)

TRAFFIC HANDLING APPROACH:
- SHIFT TRAFFIC TO NEW GRADE SEPARATION FACILITY

STAGE CONSTRUCTION ACTIVITIES:
-CONSTRUCT REALIGNED ROAD CONFORMS
-COMPLETE DRAINAGE FACILITIES
-REMOVE BASE AND SURFACING OF EXIST ROAD

LEGEND:

- CRASH CUSHION ARRAY (ARRAY TS 11)
- TEMPORARY BARRIER (TYPE K)
- DIRECTION OF TRAVEL
- REMOVE BASE AND SURFACING (EXIST ROAD)

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: SW
DRAWN BY: SW/FD
CHECKED BY: JZ
IN CHARGE: AB
DATE: 07/27/2011

**RECORD SET**
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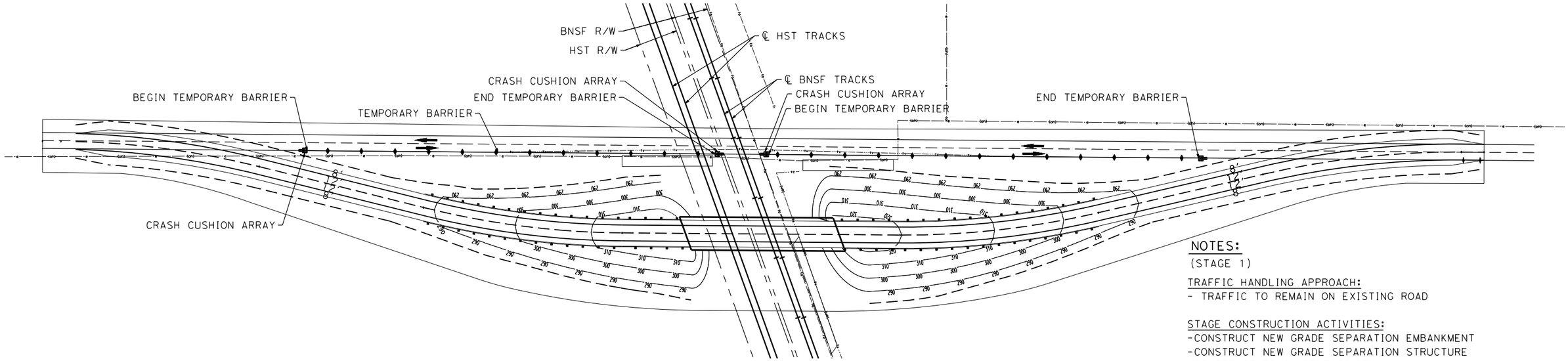
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF - AVE 21 WYE
GENERAL STAGE CONSTRUCTION &
TRAFFIC HANDLING APPROACH
SHEET 1 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. CT5000-A
SCALE NO SCALE
SHEET NO. ### OF ###

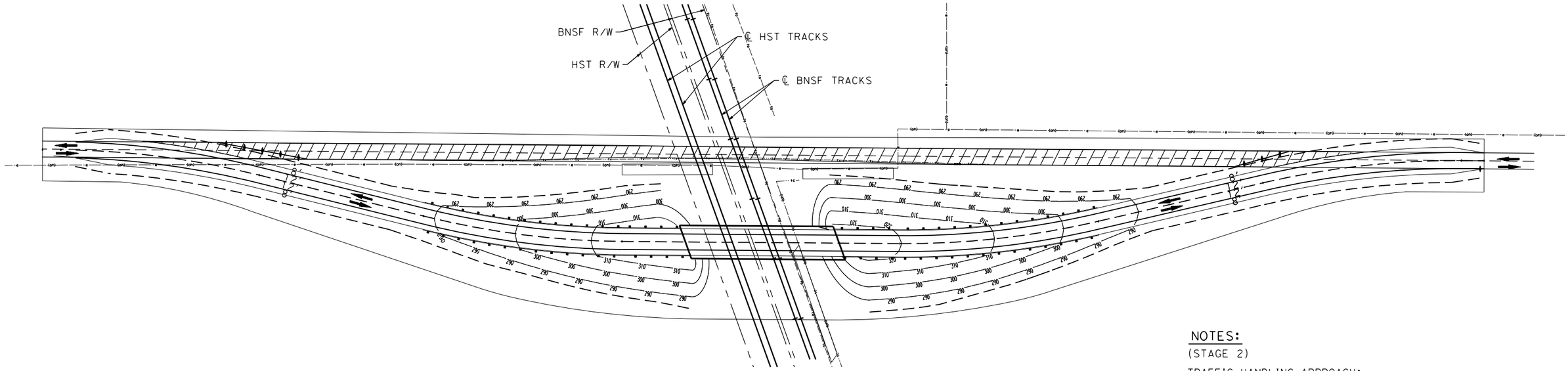



## STAGE CONSTRUCTION (STAGE 1)

NOTES:
(STAGE 1)

TRAFFIC HANDLING APPROACH:
- TRAFFIC TO REMAIN ON EXISTING ROAD

STAGE CONSTRUCTION ACTIVITIES:
-CONSTRUCT NEW GRADE SEPARATION EMBANKMENT
-CONSTRUCT NEW GRADE SEPARATION STRUCTURE
-CONSTRUCT DRAINAGE FACILITY




## STAGE CONSTRUCTION (STAGE 2)

NOTES:
(STAGE 2)

TRAFFIC HANDLING APPROACH:
- SHIFT TRAFFIC TO NEW GRADE SEPARATION FACILITY

STAGE CONSTRUCTION ACTIVITIES:
-CONSTRUCT REALIGNED ROAD CONFORMS
-COMPLETE DRAINAGE FACILITIES
-REMOVE SURFACE AND BASE OF EXIST ROAD

LEGEND:

- CRASH CUSHION ARRAY (ARRAY TS11)
- TEMPORARY BARRIER (TYPE K)
- DIRECTION OF TRAVEL
- REMOVE BASE AND SURFACING (EXIST ROAD)

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: SW
DRAWN BY: SW/FD
CHECKED BY: JZ
IN CHARGE: AB
DATE: 07/27/2011

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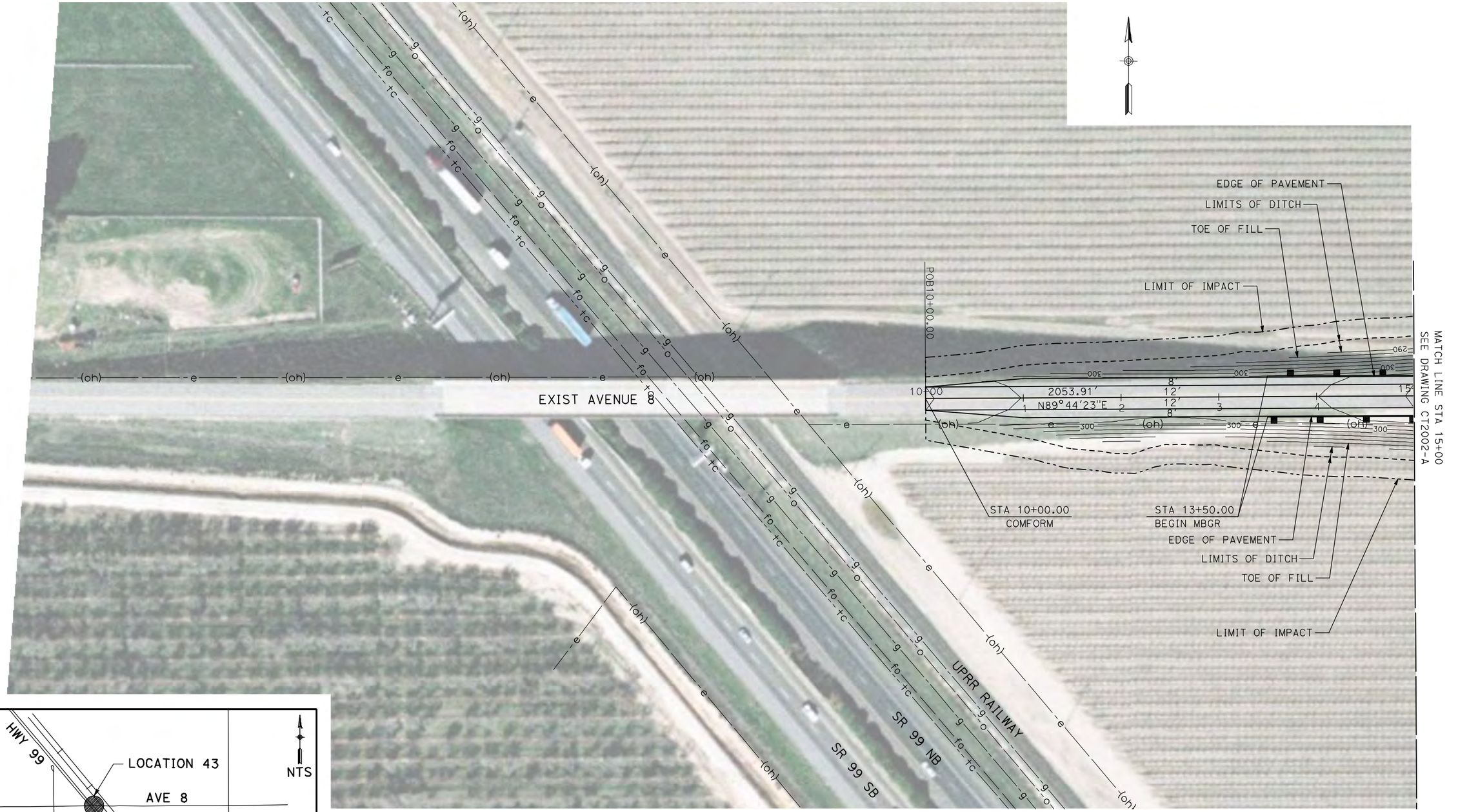
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

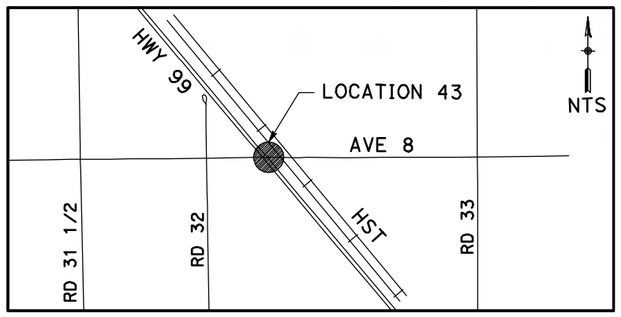
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

BNSF - AVE 21 WYE
GENERAL STAGE CONSTRUCTION &
TRAFFIC HANDLING APPROACH
SHEET 2 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. CT5000-B
SCALE NO SCALE
SHEET NO. ### OF ###

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NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT3001-A THROUGH CT3003-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: H. PHAN
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 8
LAYOUT
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT2001-A
SCALE AS SHOWN
SHEET NO. OF ###

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℄ HST TRACKS
A1-21ML
(DRAWING T1124-A)

HST R/W

STA 21+09.08
END MBGR

STA 23+45.08
BEGIN MBGR

STA 23+60.00
END BRIDGE

EDGE OF PAVEMENT
TOE OF FILL
LIMITS OF DITCH
LIMIT OF IMPACT

1610+00

2053.91'
N89°44'23"E

20+00

REALIGNED AVENUE 8

25+00

MATCH LINE STA 15+00
SEE DRAWING CT2001-A

MATCH LINE STA 29+25
SEE DRAWING CT2003-A

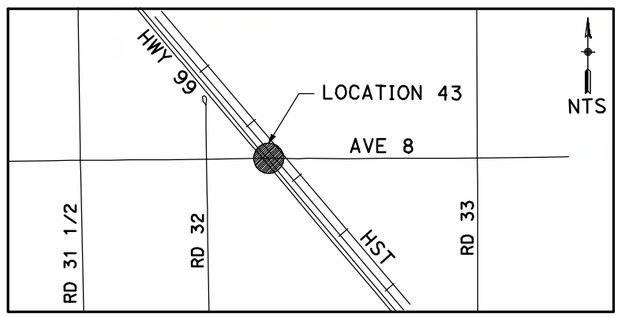
STA 21+24.00
BEGIN BRIDGE

STA 21+36.34
END MBGR

STA 23+72.05
BEGIN MBGR

PROPOSED AVENUE 8 OVERHEAD

1615+00




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT3001-A THROUGH CT3003-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
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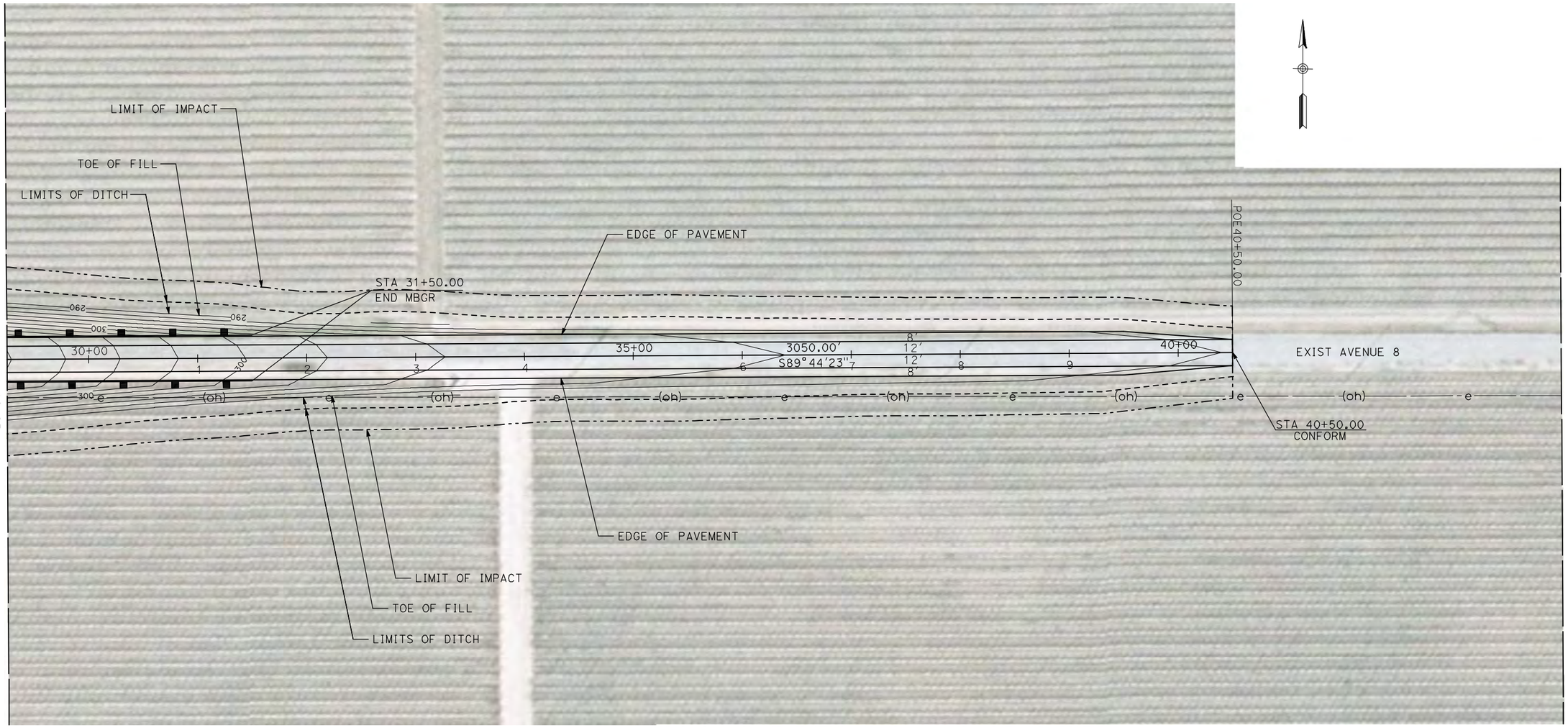
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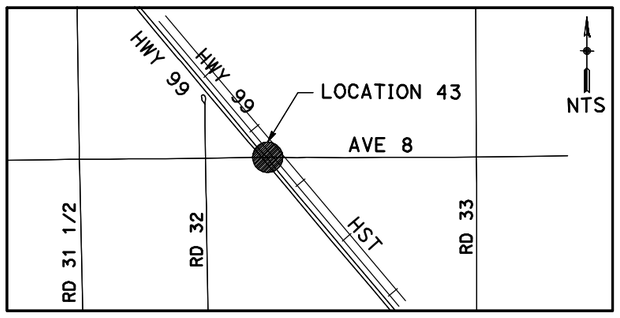
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 8
LAYOUT
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT2002-A
SCALE AS SHOWN
SHEET NO. OF ###




NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT3001-A THROUGH CT3003-A.

50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

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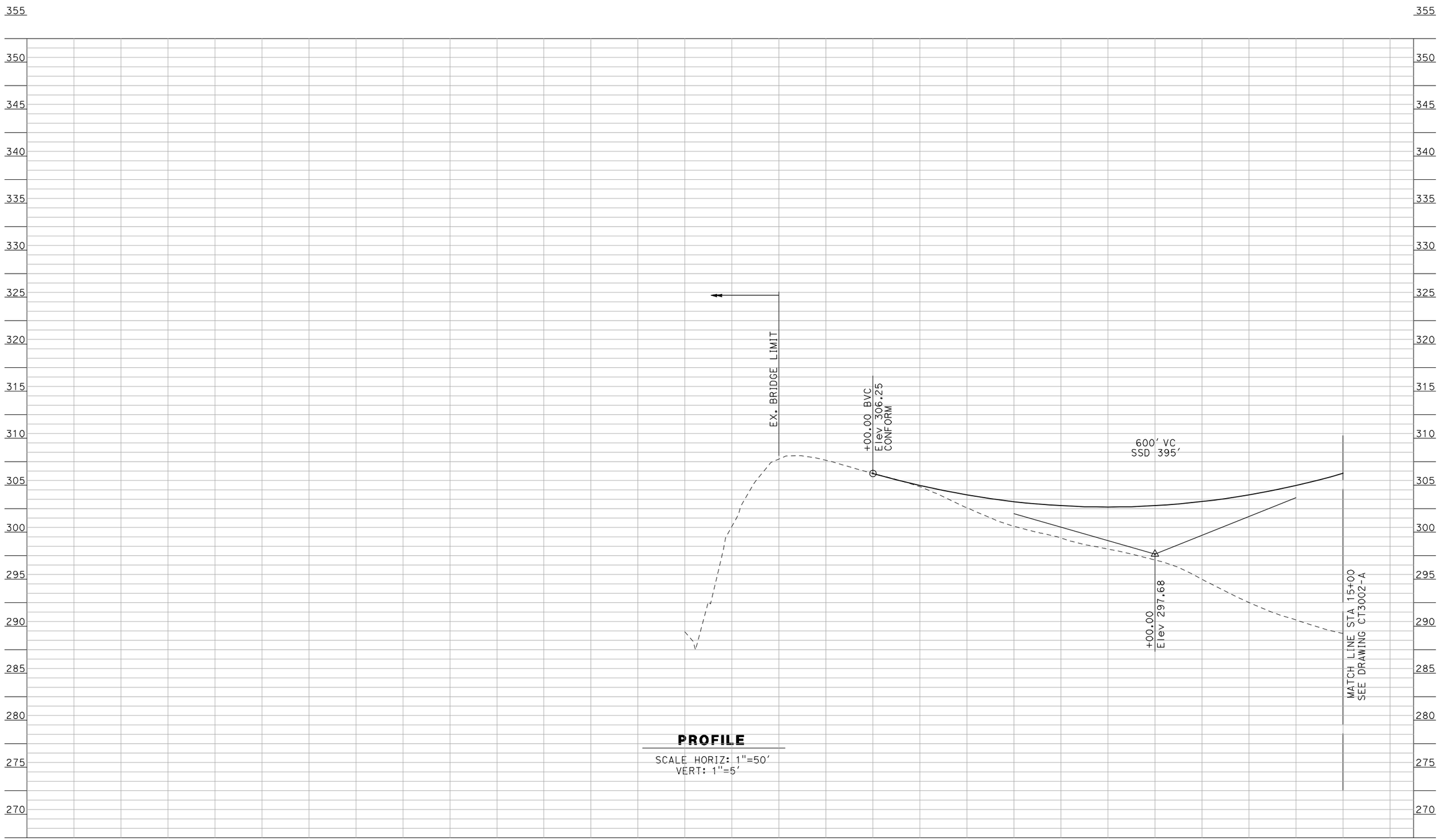
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 8
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT2003-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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DRAWN BY: F. DEMARCO
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 04/29/2011

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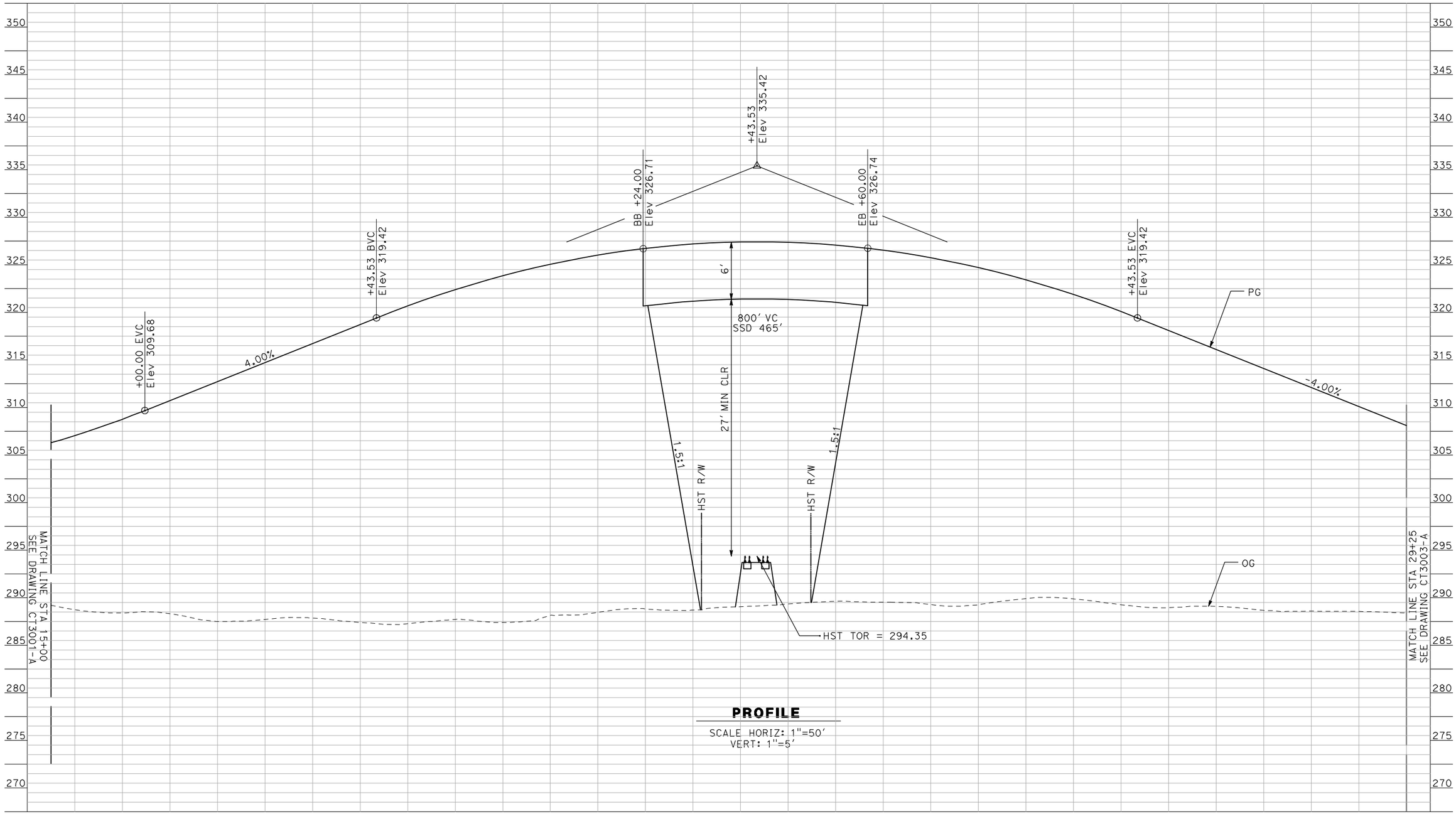
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 8
PROFILE
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT3001-A
SCALE AS SHOWN
SHEET NO. OF ###

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**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: F. DEMARCO
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 04/29/2011

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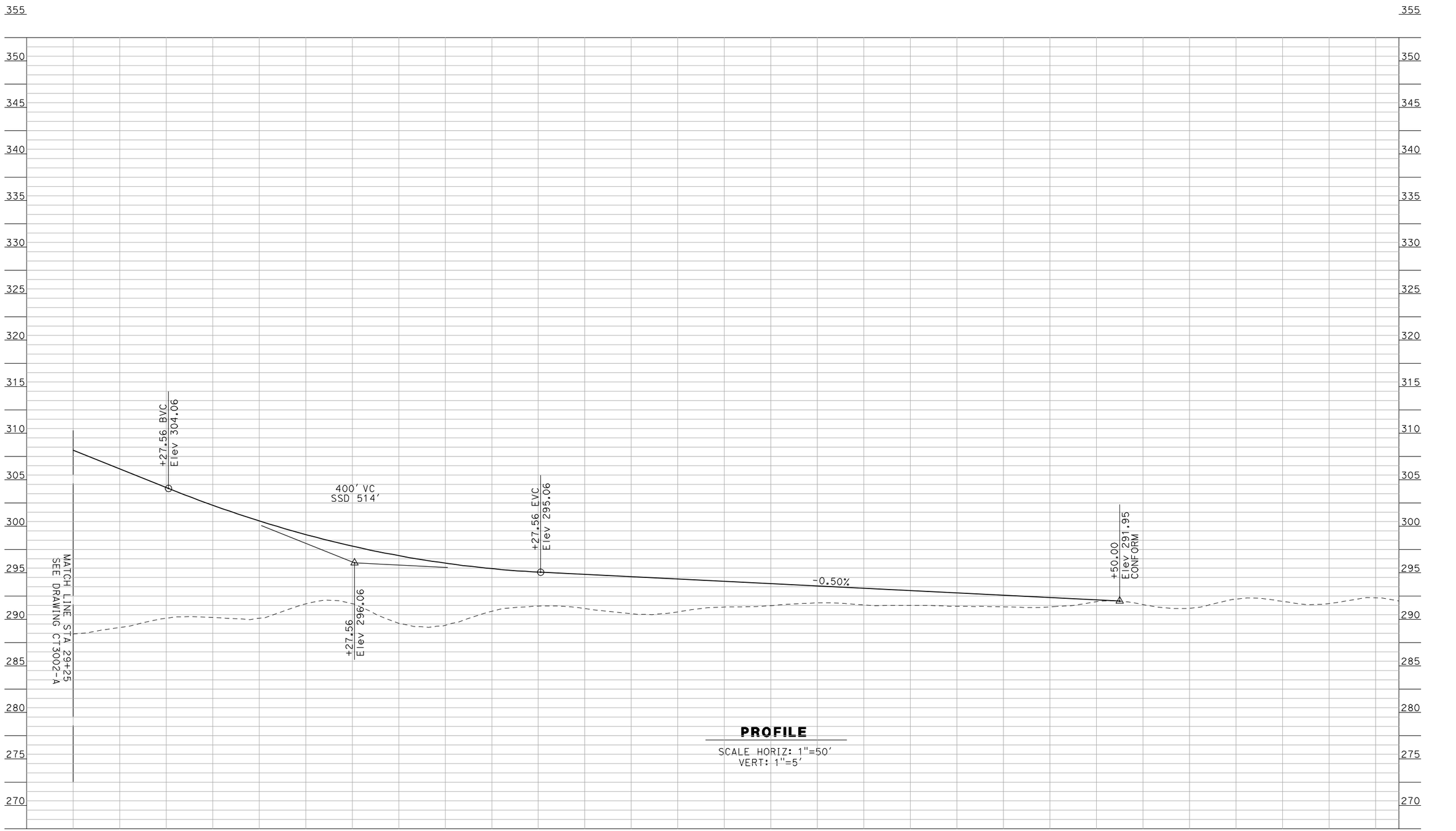

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 8
PROFILE
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT3002-A
SCALE AS SHOWN
SHEET NO. OF ###


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GibsonR1




**PROFILE**

SCALE HORIZ: 1"=50'
VERT: 1"=5'

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|---|---|---|---|---|---|

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DRAWN BY: F. DEMARCO
CHECKED BY: A. SILVER
IN CHARGE: A. BOONE
DATE: 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAINLINE - AVE 21 WYE
GRADE SEPARATION - AVENUE 8
PROFILE
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT3003-A
SCALE AS SHOWN
SHEET NO. OF ###

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GibsonR1

| SHT NO | DWG NO | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | SHEET TITLE LINE 5 | SHEET TITLE LINE 6 |
|---|---|---|---|---|---|
| | | **ROADWAY BRIDGE STRUCTURE PLAN** | | | |
| | | **BNSF AVENUE 21** | | | |
| | | GENERAL | | | |
| | SB0101 | BNSF MAIN LINE | AVENUE 21 | INDEX OF DRAWINGS | SHEET 1 OF 1 |
| | SB0201 | BNSF MAIN LINE | AVENUE 21 | STRUCTURE INDEX MAP | SHEET 1 OF 1 |
| | | OVERHEAD BRIDGES | | | |
| | ST1000 | BNSF MAIN LINE | AVENUE 21 | AVENUE 8 OVERHEAD | PLANNING STUDY |
| | ST1181 | UPRR/SR 99 MERCED CONNECTION | AVENUE 21 | SR 99 SOUTH BOUND OVERHEAD | PLANNING STUDY |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY H. Lee
DRAWN BY E. CISNEROS
CHECKED BY J. RENTERIA
IN CHARGE A. Boone
DATE 04/29/2011

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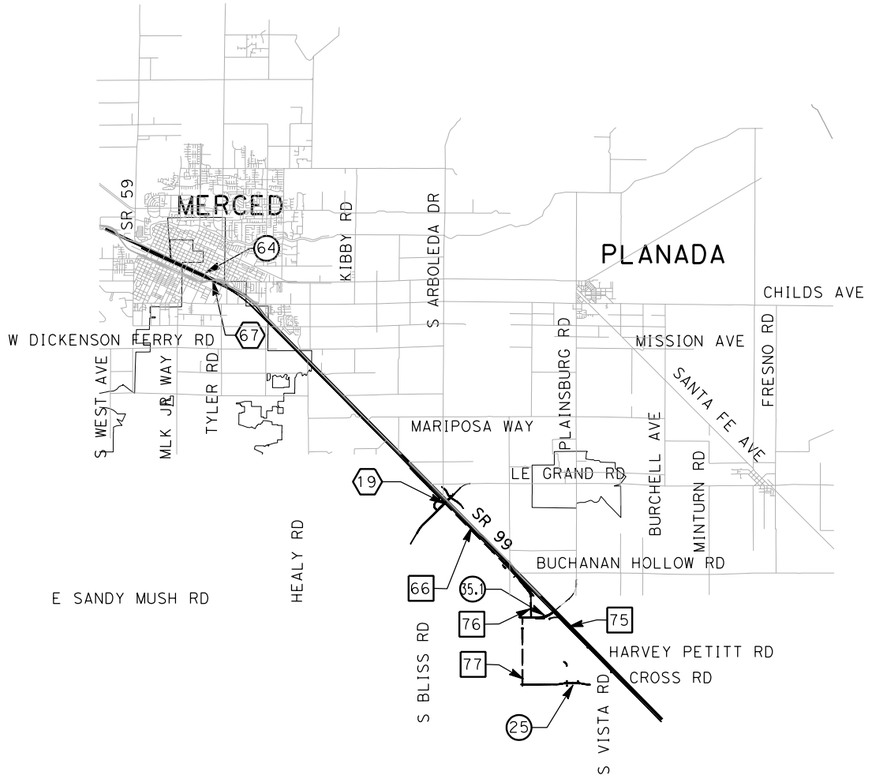
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
INDEX OF DRAWINGS
SHEET 1 OF 1

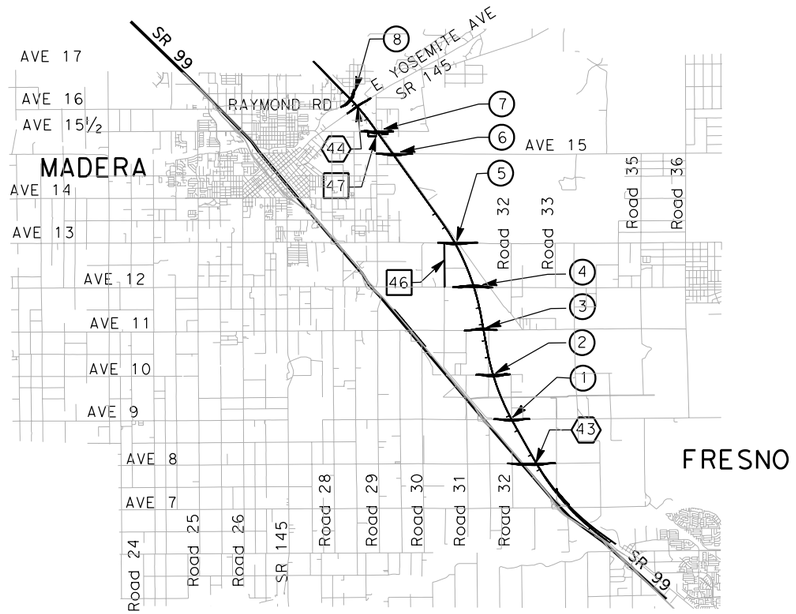
CONTRACT NO. HSR06-007
DRAWING NO. SB0101
SCALE No scale
SHEET NO. OF

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| LOCATION NO. | SHEET TITLE | STRUCTURE DWG NO. | ROADWAY DWG NO. |
|---|---|---|---|
| (43) | AVENUE 8 OVERHEAD | ST1000 | CT2000-A - CT2003-A |
| (67) | SR 99 SOUTH BOUND OVERHEAD | ST1181 | |
| | | | |
| | | | |
| | | | |




VICINITY MAP 1




VICINITY MAP 3

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

⟨X⟩ - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

9000 0 9000 18000

GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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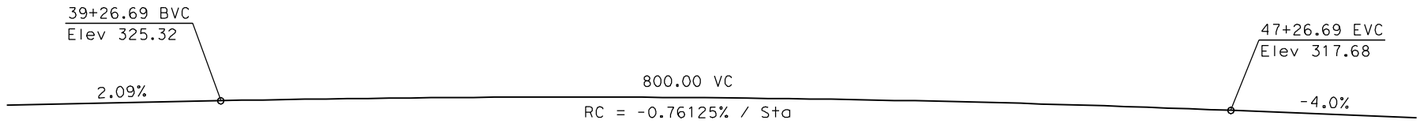
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

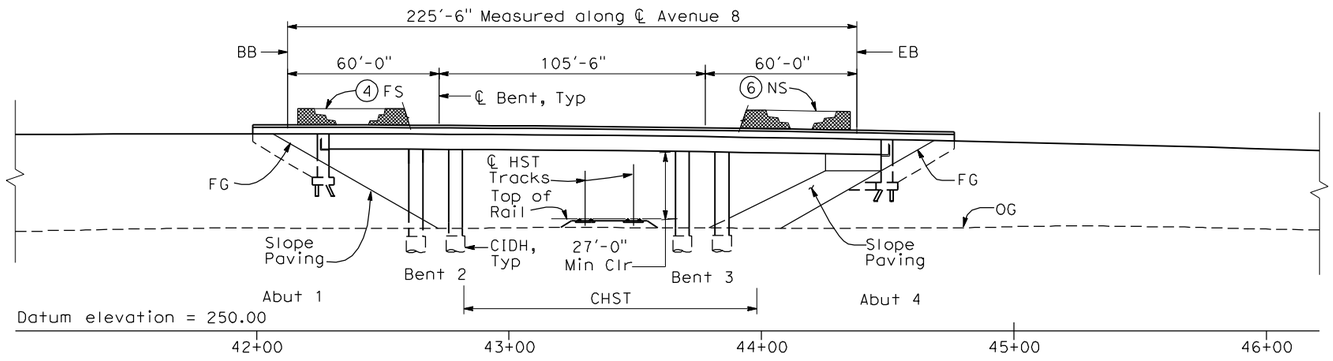
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
STRUCTURE INDEX MAP
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. SB0201
SCALE As shown
SHEET NO. OF

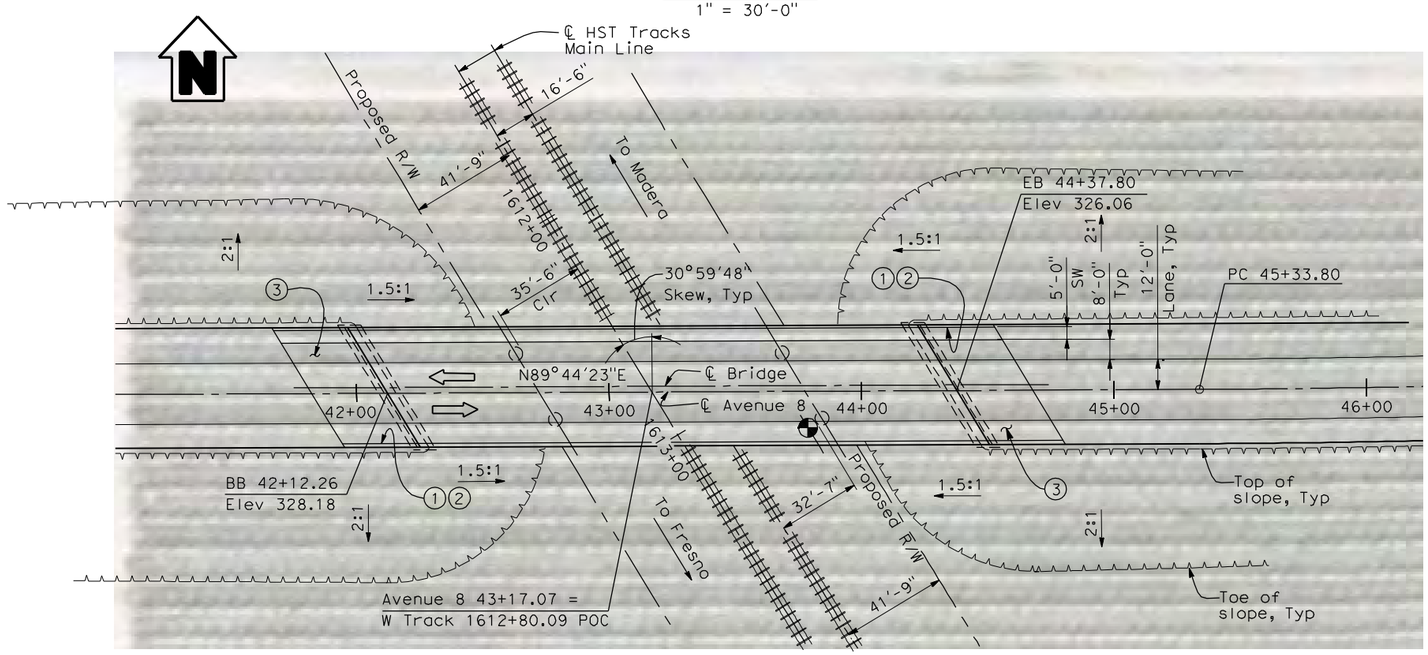
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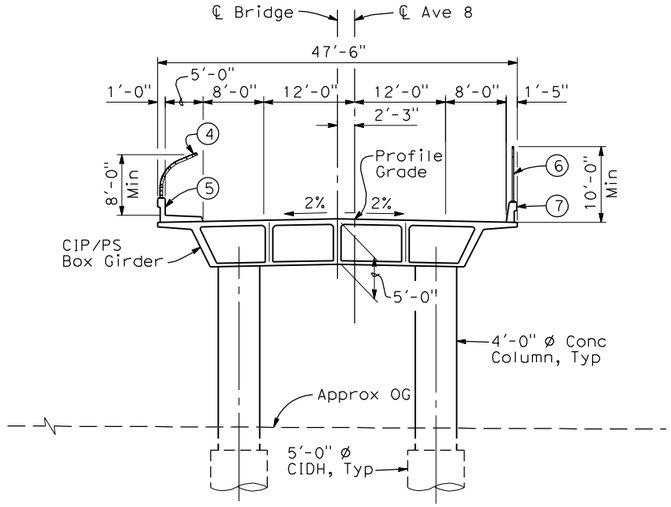

## PROFILE GRADE
NTS




## ELEVATION
1" = 30'-0"




## PLAN
1" = 30'-0"




## TYPICAL SECTION
1"=10'-0"

**NOTES:**

1. Paint "Bridge No. XX-XX"
2. Paint "Avenue 8 OH"
3. Structure Approach Slab Type N (30S)
4. Chain Link Railing Type 3
5. Concrete Barrier Type 26 (Mod)
6. Chain Link Railing Type 7 (Mod)
7. Concrete Barrier Type 732
8. Bearing of Avenue 8 to be determined.
9. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 5'-0" |
| LENGTH | = | 225'-6" |
| WIDTH | = | 47'-6" |
| AREA | = | 10,713 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 43**

30 0 30 60
1"=30'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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IN CHARGE A. BOONE
DATE 04/29/2011

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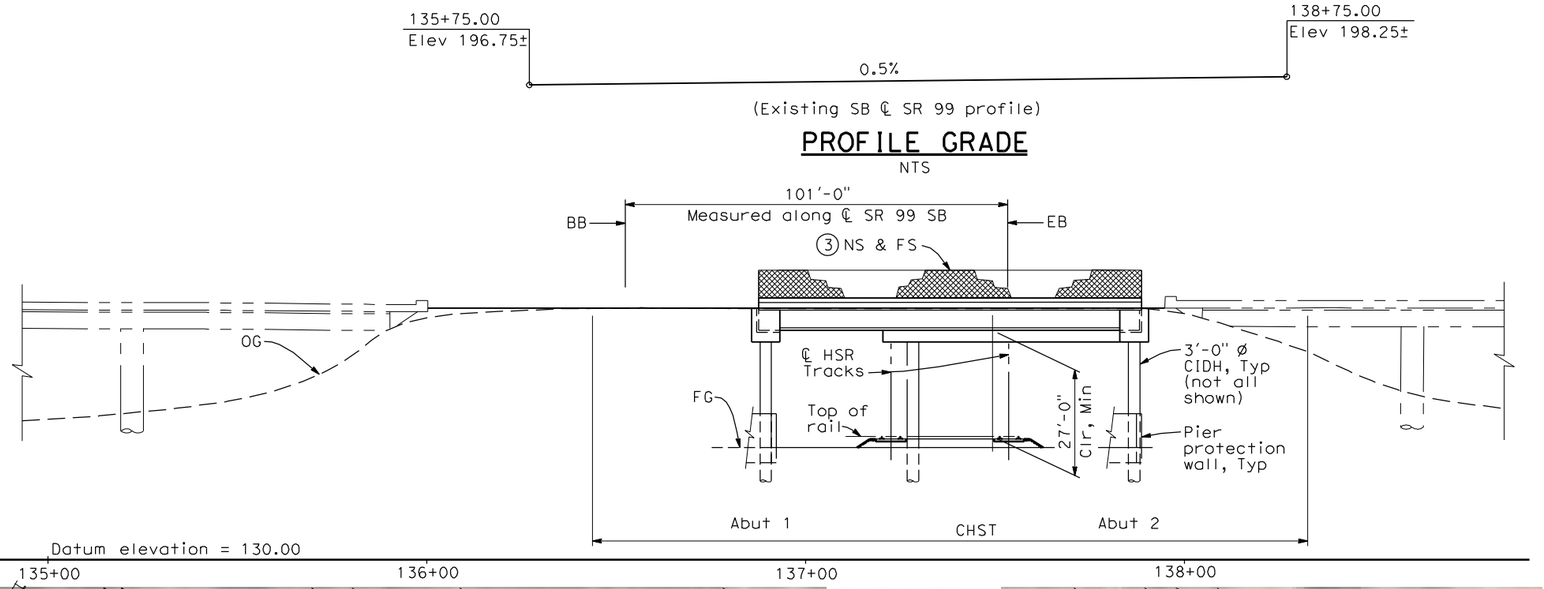
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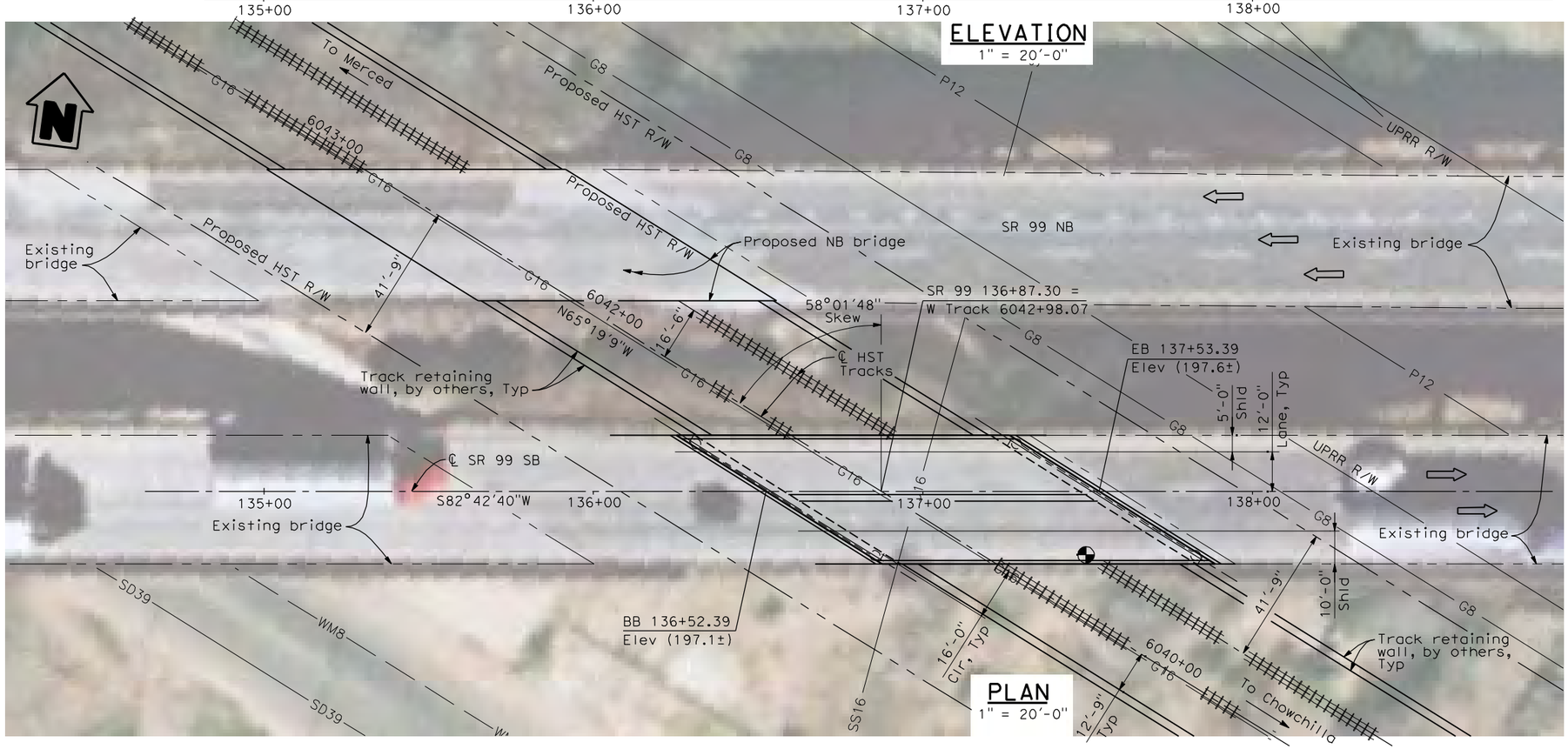
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

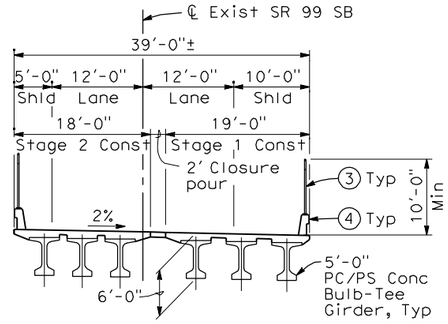
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF MAIN LINE
AVENUE 21
AVENUE 8 OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1000
SCALE As shown
SHEET NO. OF

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cisnerose




## TYPICAL SECTION

1" = 10'-0"

**NOTES:**

1. Paint "Bridge No. WX-YY"
2. Paint "SR 99 OH"
3. Chain Link Railing Type 7 (Mod)
4. Concrete Barrier Type 732
5. Southbound bridge shown, northbound bridge similar.
6. Bearing, stationing and elevation of SR 99 SB to be verified.
7. Existing underground and overhead utilities to be determined.

**LEGEND:**

⇦ Direction of traffic

Point of minimum vertical clearance

G = Gas
FO = Fiber Optic
P = Petroleum
SD = Storm Drain
SS = Sanitary Sewer
WM = Water

| | | |
|---|---|---|
| DATE OF ESTIMATE | | |
| BRIDGE REMOVAL | = | |
| STRUCTURE DEPTH | = | 6'-0" |
| LENGTH | = | 101'-0" |
| WIDTH | = | 39'-0" |
| AREA | = | 3,950 ft² |
| COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY | = | |
| TOTAL COST | = | |

**LOCATION 67**

20 0 20 40
1"=20'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

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DRAWN BY B. DOLAN
CHECKED BY L. LEUNG
IN CHARGE A. BOONE
DATE 04/29/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
UPRR/SR 99 MERCED CONNECTION
AVENUE 21
SR 99 SOUTHBOUND OVERHEAD
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1181
SCALE As shown
SHEET NO. OF

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| LOCATION NO. | SHT NO. | DWG NO. | DRAWING TITLE LINE 3 | DRAWING TITLE LINE 4 | DRAWING TITLE LINE 5 | DRAWING TITLE LINE 6 |
|---|---|---|---|---|---|---|
| GENERAL | | | | | | |
| | | B0110-A | BNSF - AVE 21 WYE | GENERAL | INDEX OF DRAWINGS | SHEET 1 OF 1 |
| | | B0111-A | BNSF - AVE 21 WYE | GENERAL | ABBREVIATIONS, SYMBOLS & NOTES | SHEET 1 OF 1 |
| | | B0115-A | BNSF - AVE 21 WYE | | INDEX MAP | SHEET 1 OF 4 |
| | | B0116-A | BNSF - AVE 21 WYE | | INDEX MAP | SHEET 2 OF 4 |
| | | B0119-A | BNSF - AVE 21 WYE | ALTERNATIVES NO.1, NO.2, NO.3 | INDEX MAP | SHEET 3 OF 4 |
| | | B0120-A | BNSF - AVE 21 WYE | ALTERNATIVES NO.1, NO.2, NO.3 | INDEX MAP | SHEET 4 OF 4 |
| | | CT0121-A | BNSF - AVE 21 WYE | TYPICAL CROSS SECTIONS | LOCAL ROAD | SHEET 1 OF 1 |
| A1 - AVE 21 WYE (LAYOUT) | | | | | | |
| 46 | | CR4000-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - ROAD 30 1/2 | LAYOUT | SHEET 1 OF 1 |
| 47 | | CR4001-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - ROAD 29 | LAYOUT | SHEET 1 OF 1 |
| 48 | | CR4002-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - AVENUE 20 1/2 | LAYOUT | SHEET 1 OF 1 |
| 49 | | CR4003-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - SHARON ST | LAYOUT | SHEET 1 OF 1 |
| 50 | | CR4004-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - AVENUE 26 | LAYOUT | SHEET 1 OF 1 |
| 51 | | CR4005-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - AVENUE 26 | LAYOUT | SHEET 1 OF 2 |
| 52 | | CR4006-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - SANTA FE DR | LAYOUT | SHEET 2 OF 2 |
| 53 | | CR4007-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - SANTA FE AVE | LAYOUT | SHEET 1 OF 3 |
| 53 | | CR4008-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - SANTA FE AVE | LAYOUT | SHEET 2 OF 3 |
| 53 | | CR4009-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - SANTA FE AVE | LAYOUT | SHEET 3 OF 3 |
| 55 | | CR4010-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - BURCHELL AVE | LAYOUT | SHEET 1 OF 1 |
| 56 | | CR4011-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - ROAD 24 | LAYOUT | SHEET 1 OF 1 |
| 57 | | CR4012-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - HANOVER RD | LAYOUT | SHEET 1 OF 1 |
| 58 | | CR4013-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - AVENUE 20 1/2 | LAYOUT | SHEET 1 OF 1 |
| 59 | | CR4014-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - AVENUE 20 1/2 | LAYOUT | SHEET 1 OF 1 |
| 60 | | CR4015-A | BNSF MAIN LINE - AVE 21 WYE | LOCAL ROAD - ROAD 22 | LAYOUT | SHEET 1 OF 1 |
| 66 | | CR4016-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - PROPOSED WEST FRONTAGE ROAD | LAYOUT | SHEET 1 OF 2 |
| 66 | | CR4017-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - PROPOSED WEST FRONTAGE ROAD | LAYOUT | SHEET 2 OF 2 |
| 66 | | CR4016R-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - PROPOSED WEST FRONTAGE ROAD | LAYOUT | SHEET 1 OF 2 |
| 66 | | CR4017R-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - PROPOSED WEST FRONTAGE ROAD | LAYOUT | SHEET 2 OF 2 |
| 67 | | CR4018-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - ROAD 33 | LAYOUT | SHEET 1 OF 1 |
| A1 - AVE 21 WYE - ALT 01 (LAYOUT) | | | | | | |
| 83 | | CR4200-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - WHITE ROCK RD | LAYOUT | SHEET 1 OF 2 |
| 83 | | CR4201-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - WHITE ROCK RD | LAYOUT | SHEET 2 OF 2 |
| 84 | | CR4202-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - BURCHELL AVE | LAYOUT | SHEET 1 OF 1 |
| A1 - AVE 21 WYE - ALT 02 (LAYOUT) | | | | | | |
| 85 | | CR4255-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - FRESNO ROAD | LAYOUT | SHEET 1 OF 1 |
| A1 - AVE 21 WYE - ALT 03 (LAYOUT) | | | | | | |
| 86 | | CR4300-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - SANTA FE AVE | LAYOUT | SHEET 1 OF 2 |
| 86 | | CR4301-A | BNSF MERCED CONNECTION - AVE 21 WYE | LOCAL ROAD - SANTA FE AVE | LAYOUT | SHEET 2 OF 2 |
| | | | | | | |
| | | CR1479-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | AVENUE 22 CONNECTOR TO ROAD 11 | PLAN AND PROFILE |
| | | CR1480-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | AVENUE 22 CONNECTOR TO ROAD 11 | PLAN AND PROFILE |
| | | CR1483-A | BNSF MAIN LINE | AVENUE 24/SR152/AVENUE 21 | AVENUE 21 | PLAN AND PROFILE |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | 12/12/2011 | RG | | | |

DESIGNED BY R. GIBSON
DRAWN BY F. DEMARCO
CHECKED BY
IN CHARGE A. BOONE
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21
GENERAL
INDEX OF DRAWINGS
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. B0110-A
SCALE NONE
SHEET NO. ### OF ###

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DeMarcoF

# A. BOONEBREVIATIONS

## ALIGNMENT

HORIZONTAL

| | |
|---|---|
| BC | BEGINNING OF CURVE |
| EC | END OF CURVE |
| PC | POINT OF CURVE |
| PI | POINT OF INTERSECTION OF TWO TANGENTS |
| POC | POINT ON CURVE |
| POT | POINT ON TANGENT |
| PRC | POINT OF REVERSE CURVES |
| PT | POINT OF TANGENCY |
| R | RADIUS OF CURVATURE IN FEET |
| V, DS | VELOCITY, DESIGNSPEED IN MILES PER HOUR |

VERTICAL

| | |
|---|---|
| PVC | POINT OF VERTICAL CURVE (BEGINNING OF CURVE) |
| PVI | POINT OF VERTICAL INTERSECTION (OF TANGENTS) |
| PVT | POINT OF VERTICAL TANGENCY (ENDING OF CURVE) |
| VC | VERTICAL CURVE |

## MISCELLANEOUS

| | |
|---|---|
| BEG | BEGIN |
| BLVD | BOULEVARD |
| ℄ | CENTER LINE |
| CL | CENTERLINE, CLASS |
| CLR | CLEAR |
| COL | COLUMN |
| DWG | DRAWING |
| EQ | EQUATION |
| EXIST(E) | EXISTING |
| IN | INCH |
| LT | LEFT |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| N | NORTH |
| NB | NORTH BOUND |
| NTS | NOT TO SCALE |
| OG | ORIGINAL GROUND |
| O/H OH | OVERHEAD |
| PG&E | PACIFIC GAS & ELECTRIC |
| PGL, FG | PROFILE GRADE LINE |
| RR | RAILROAD |
| RD | ROAD |
| R/W | RIGHT OF WAY |
| RT | RIGHT |
| SS | SANITARY SEWER |
| SHT | SHEET |
| ST | STREET |
| STD | STANDARD |
| SD | STORM DRAIN |
| STRUCT, STR | STRUCTURE |
| T | TELEPHONE |
| TOR | TOP OF RAIL |
| TK | TRACK |
| TYP | TYPICAL |
| TBD | TO BE DETERMINED |
| TF | TELECOMMUNICATIONS FIBER OPTIC |
| V VERT | VERTICAL |
| W | WATER, WEST |

# SYMBOLS

MATCH LINE

HST TRACK

PROPOSED HST RIGHT-OF-WAY

FREIGHT/PASSENGER TRACK - EXISTING

EXISTING RIGHT-OF-WAY OR EXISTING BRIDGE FEATURES

RETAINING WALLS

ORIGINAL GROUND

GAS LINE (16")

COMMUNICATION LINE

WATER LINE

FIBER OPTIC LINE

ELECTRICAL LINE

ELECTRICAL TOWER

SEWER LINE

STORM DRAIN LINE

FUEL LINE

TELEPHONE LINE

PETROLEUM LINE (12")

OVERHEAD LINE

NORTH ARRROW

PVI

UNDER. GIBSONROUND LINE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 07/20/2011

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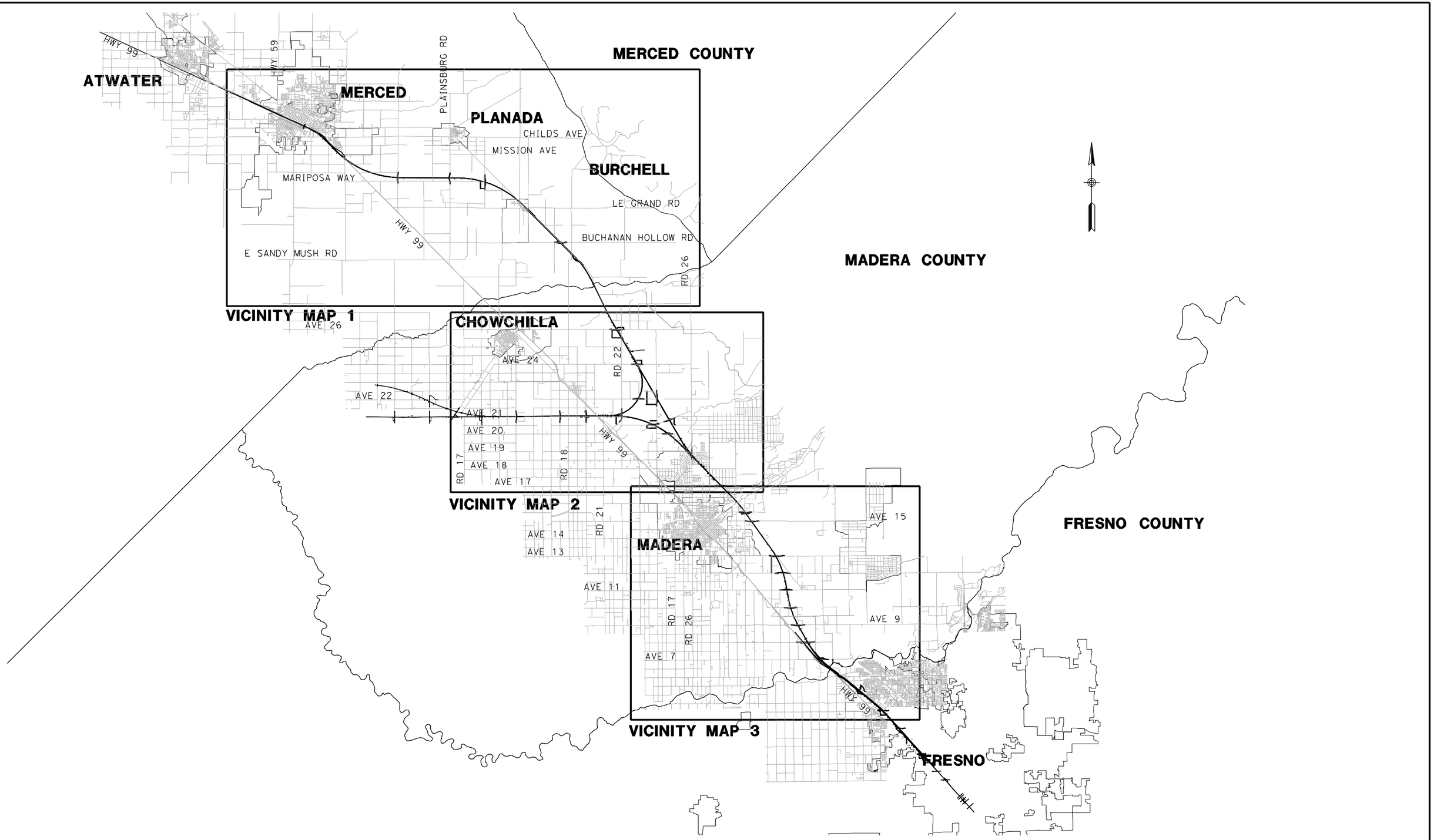
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
GENERAL
A. BOONEBREVIATIONS, SYMBOLS & NOTES
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. BO111-A
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| 1 | 12/12/2011 | RG | | | |

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO
BNSF - AVE 21 WYE

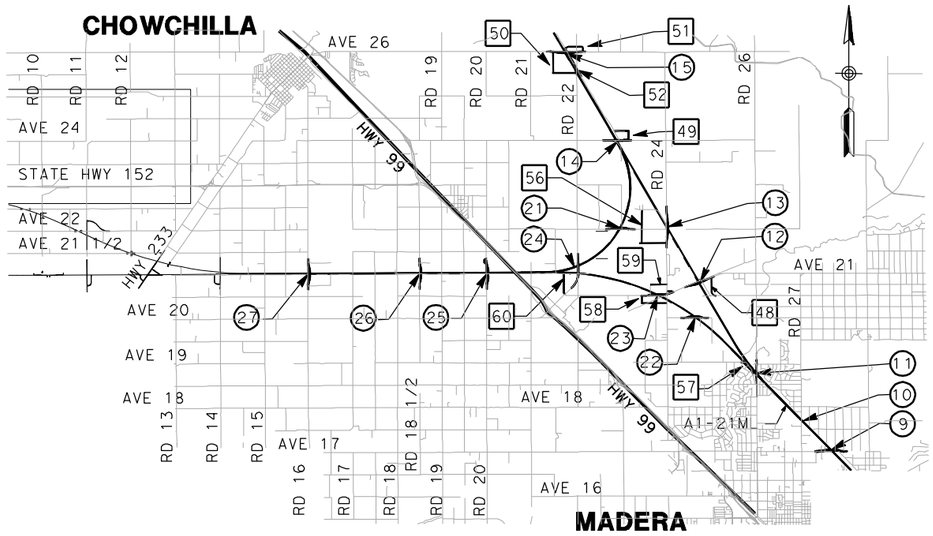
INDEX MAP
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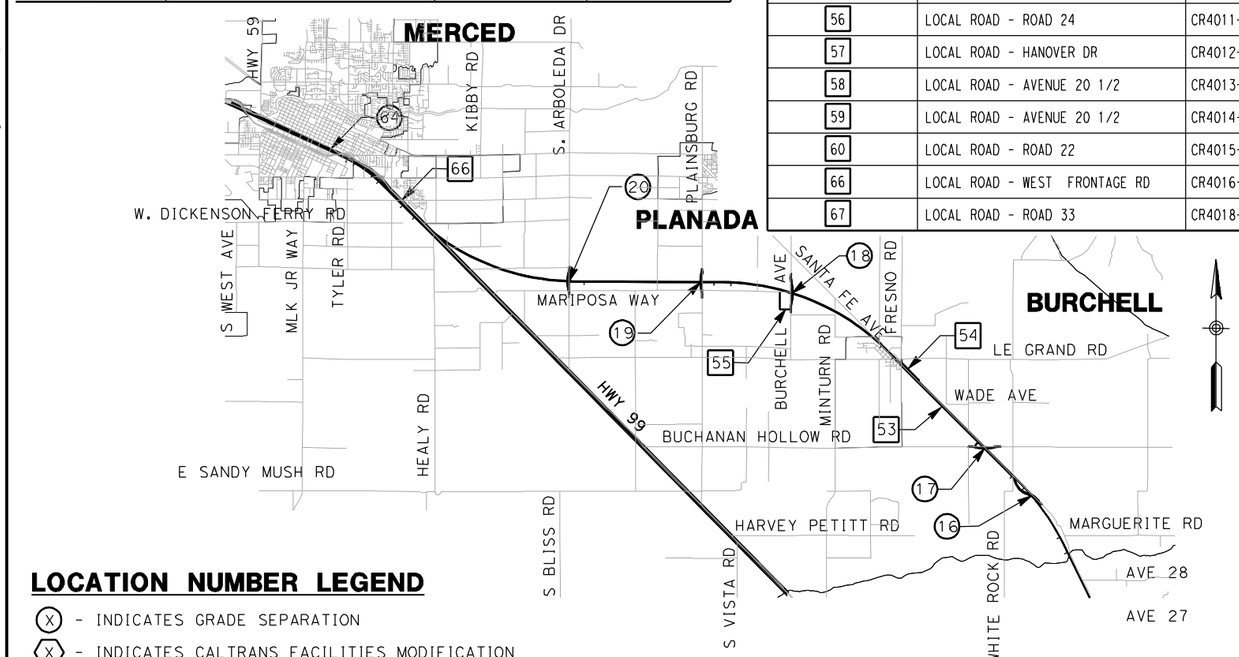
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| LOCATION NO. | SHEET TITLE | ROADWAY DWG NO. | STRUCTURE DWG NO. |
|---|---|---|---|
| (1) | GRADE SEPARATION - AVENUE 9 | CT0001-A - CT0003-A | ST1001 |
| (2) | GRADE SEPARATION - AVENUE 10 | CT0004-A - CT0006-A | ST1002 |
| (3) | GRADE SEPARATION - AVENUE 11 | CT0007-A - CT0009-A | ST1003 |
| (4) | GRADE SEPARATION - AVENUE 12 | CT0010-A - CT0012-A | ST1004 |
| (5) | GRADE SEPARATION - AVENUE 13 | CT0013-A - CT0016-A | ST1005 |
| (6) | GRADE SEPARATION - AVENUE 15 | CT0017-A - CT0019-A | ST1006 |
| (7) | GRADE SEPARATION - AVENUE 15 1/2 | CT0020-A - CT0022-A | ST1007 |
| | | | |
| (9) | GRADE SEPARATION - AVENUE 17 | CT0026-A - CT0028-A | ST1009 |
| (11) | UNDERPASS - ROAD 26 | CT0032-A - CT0034-A | ST1011 |
| (12) | GRADE SEPARATION - AVENUE 21 | CT0035-A - CT0037-A | ST1012 |
| (13) | GRADE SEPARATION - ROAD 24 | CT0038-A - CT0040-A | ST1013 |
| (14) | UNDERPASS - AVENUE 24 | CT0041-A - CT0043-A | ST1014 |
| (15) | GRADE SEPARATION - AVENUE 26 | CT0044-A - CT0047-A | ST1015 |
| (16) | GRADE SEPARATION - SANTA FE AVE | CT0048-A - CT0050-A | ST1016 |
| (17) | GRADE SEPARATION - BUCHANAN HOLLOW | CT0051-A - CT0053-A | ST1017 |
| (18) | GRADE SEPARATION - BURCHELL AVE | CT0054-A - CT0056-A | ST1018 |
| (19) | GRADE SEPARATION - PLAINSBURG RD | CT0057-A - CT0059-A | ST1019 |
| (20) | GRADE SEPARATION - ARBOLEDA DR | CT0060-A - CT0062-A | ST1020 |
| (21) | GRADE SEPARATION - AVENUE 22 | CT0063-A - CT0065-A | ST1021 |

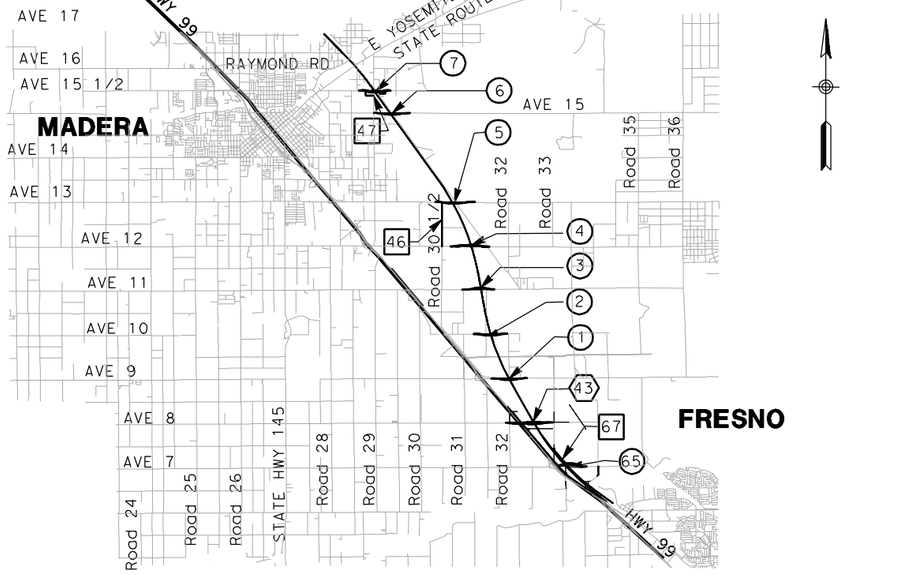
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| (22) | GRADE SEPARATION - AVENUE 20 | CT0066-A - CT0068-A | ST1022 |
| (23) | GRADE SEPARATION - AVENUE 20 1/2 | CT0069-A - CT0071-A | ST1023 |
| (24) | UNDERPASS - ROAD 22 | CT0073-A - CT0075-A | |
| (25) | GRADE SEPARATION - ROAD 20 | CT0076-A - CT0078-A | ST1026 |
| (26) | GRADE SEPARATION - ROAD 18 1/2 | CT0079-A - CT0081-A | ST1027 |
| (27) | GRADE SEPARATION - ROAD 16 | CT0082-A - CT0084-A | ST1028 |
| (64) | GRADE SEPARATION - G STREET | CT0149 | ST1180 |
| (65) | GRADE SEPARATION - AVENUE 7 | CT0146-A - CT0148-A | ST1070 |
| (43) | CALTRANS - AVENUE 8 | CT2000-A - CT2003-A | ST1000 |
| | | | |
| [46] | LOCAL ROAD - ROAD 30 1/2 | CR4000-A | |
| [47] | LOCAL ROAD - ROAD 29 | CR4001-A | |
| [48] | LOCAL ROAD - AVENUE 20 1/2 | CR4002-A | |
| [49] | LOCAL ROAD - SHARON | CR4003-A | |
| [50] | LOCAL ROAD - AVENUE 26 | CR4004-A | |
| [51] | LOCAL ROAD - AVENUE 26 | CR4005-A | |
| [52] | LOCAL ROAD - SANTA FE AVE | CR4006-A | |
| [53] | LOCAL ROAD - SANTA FE AVE | CR4007-A - CR4009-A | |
| [54] | LOCAL ROAD - SANTA FE AVE (SOUTH) | CR4009-A | |
| [55] | LOCAL ROAD - BURCHELL RD | CR4010-A | |
| [56] | LOCAL ROAD - ROAD 24 | CR4011-A | |
| [57] | LOCAL ROAD - HANOVER DR | CR4012-A | |
| [58] | LOCAL ROAD - AVENUE 20 1/2 | CR4013-A | |
| [59] | LOCAL ROAD - AVENUE 20 1/2 | CR4014-A | |
| [60] | LOCAL ROAD - ROAD 22 | CR4015-A | |
| [66] | LOCAL ROAD - WEST FRONTAGE RD | CR4016-A - CR4017-A | |
| [67] | LOCAL ROAD - ROAD 33 | CR4018-A | |




## VICINITY MAP 2




## VICINITY MAP 1




## VICINITY MAP 3

### LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

(X) - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

FOR ROADWAY STRUCTURES SEE STRUCTURAL INDEX MAPS

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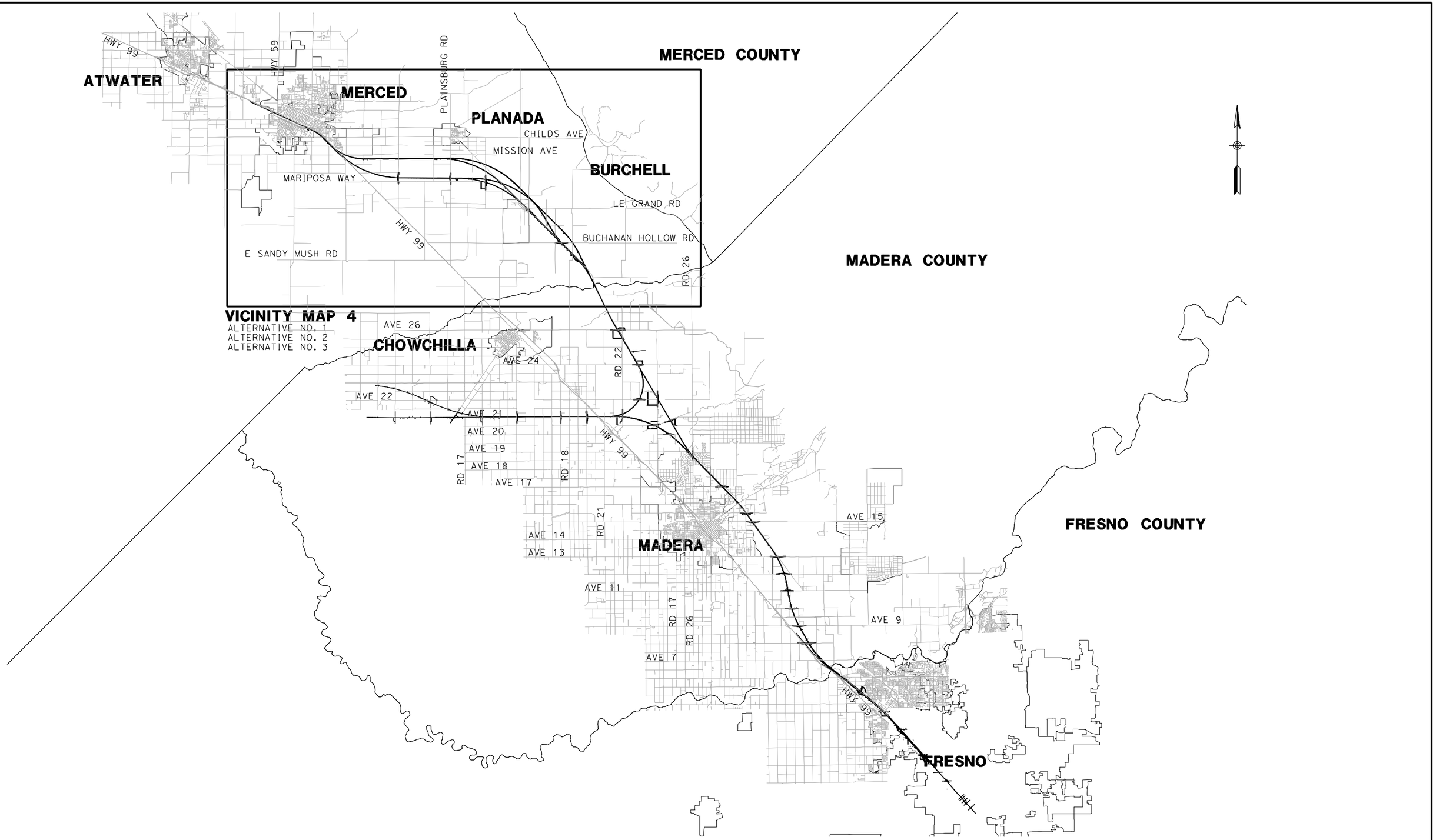
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE

INDEX MAP
SHEET 2 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. B0116-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

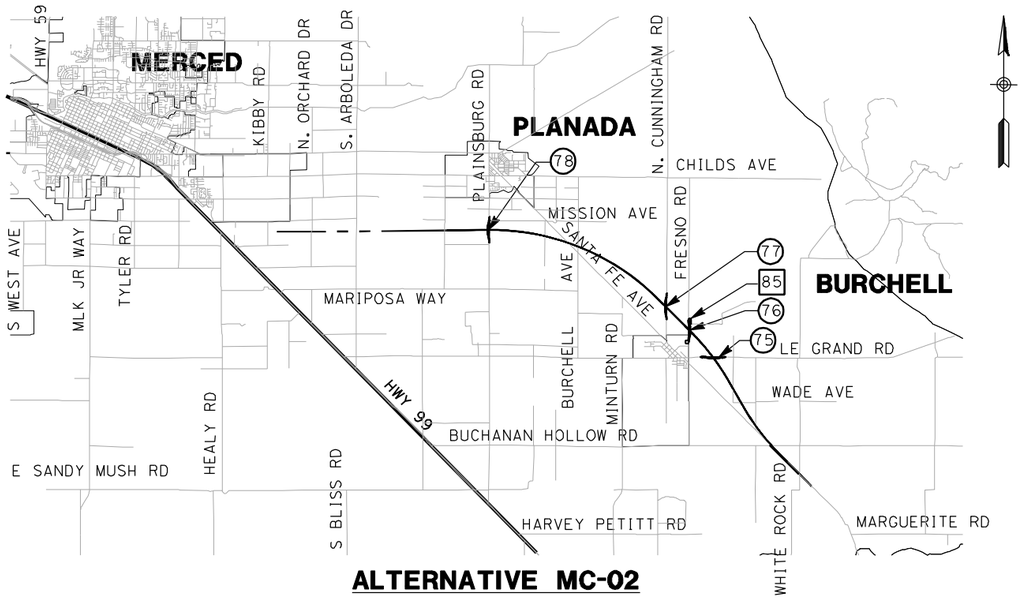
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO
BNSF - AVE 21 WYE
MC - ALTERNATIVES NO. 1, NO. 2, & NO. 3

INDEX MAP
SHEET 3 OF 4

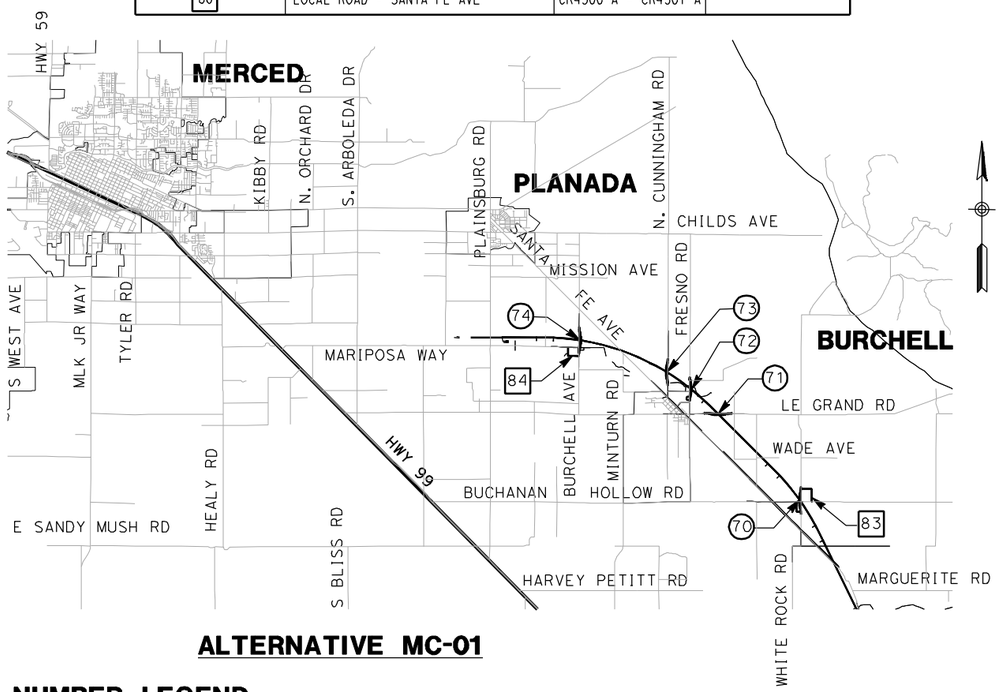
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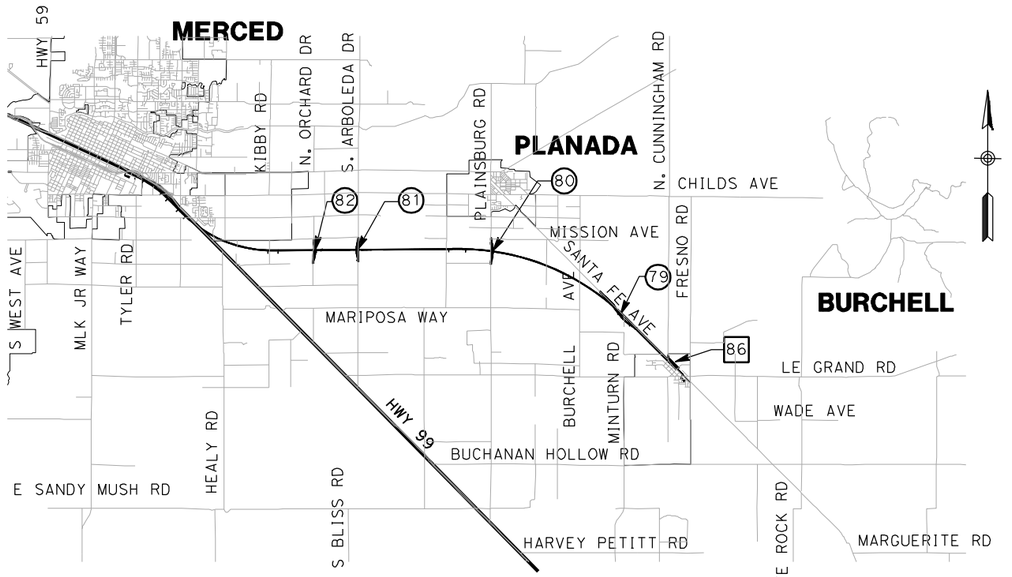
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| (70) | GRADE SEPARATION - WHITE ROCK RD | CT0200-A - CT0202-A | ST1050 |
| (71) | GRADE SEPARATION - LE GRAND RD | CT0203-A - CT0205-A | ST1051 |
| (72) | GRADE SEPARATION - S. FRESNO RD | CT0206-A - CT0208-A | ST1052 |
| (73) | GRADE SEPARATION - S. CUNNINGHAM RD | CT0209-A - CT0211-A | ST1053 |
| (74) | GRADE SEPARATION - S. BURCHELL AVE | CT0212-A - CT0214-A | ST1054 |
| (75) | GRADE SEPARATION - LE GRAND RD | CT0250-A - CT0252-A | ST1055 |
| (76) | GRADE SEPARATION - S. FRESNO RD | CT0253-A - CT0255-A | ST1056 |
| (77) | GRADE SEPARATION - S. CUNNINGHAM RD | CT0256-A - CT0258-A | ST1057 |
| (78) | GRADE SEPARATION - PLAINSBURG RD | CT0259-A - CT0261-A | ST1058 |
| (79) | GRADE SEPARATION - S. SANTA FE AVE | CT0300-A - CT0302-A | ST1059 |
| (80) | GRADE SEPARATION - PLAINSBURG RD | CT0303-A - CT0305-A | ST1060 |
| (81) | GRADE SEPARATION - S. ARBOLEDA RD | CT0306-A - CT0308-A | ST1061 |
| (82) | GRADE SEPARATION - S. ORCHARD DR | CT0309-A - CT0311-A | ST1062 |
| [83] | LOCAL ROAD - WHITE ROCK RD | CR4200-A - CR4201-A | |
| [84] | LOCAL ROAD - BURCHELL AVE | CR4202-A | |
| [85] | LOCAL ROAD - FRESNO RD | CR4255-A | |
| [86] | LOCAL ROAD - SANTA FE AVE | CR4300-A - CR4301-A | |




**ALTERNATIVE MC-02**




**ALTERNATIVE MC-01**




**ALTERNATIVE MC-03**

## LOCATION NUMBER LEGEND

(X) - INDICATES GRADE SEPARATION

⟨X⟩ - INDICATES CALTRANS FACILITIES MODIFICATION

[X] - INDICATES LOCAL ROAD RELOCATION

FOR ROADWAY STRUCTURES SEE STRUCTURAL INDEX MAPS

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
MC - ALTERNATIVES NO. 1, NO. 2, & NO. 3

INDEX MAP
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. B0120-A
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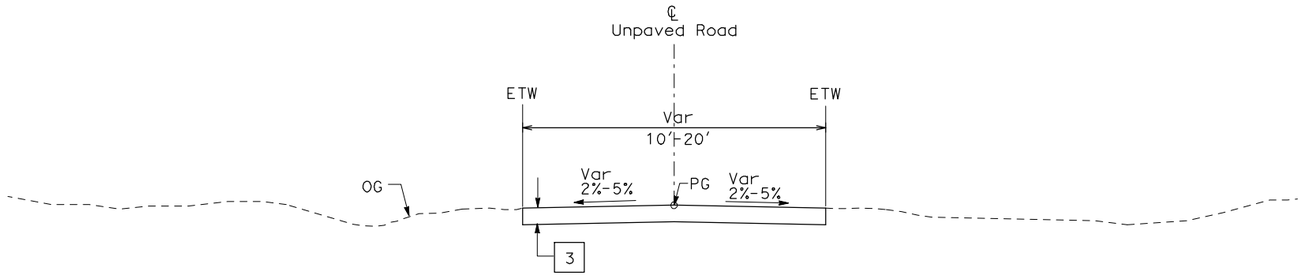
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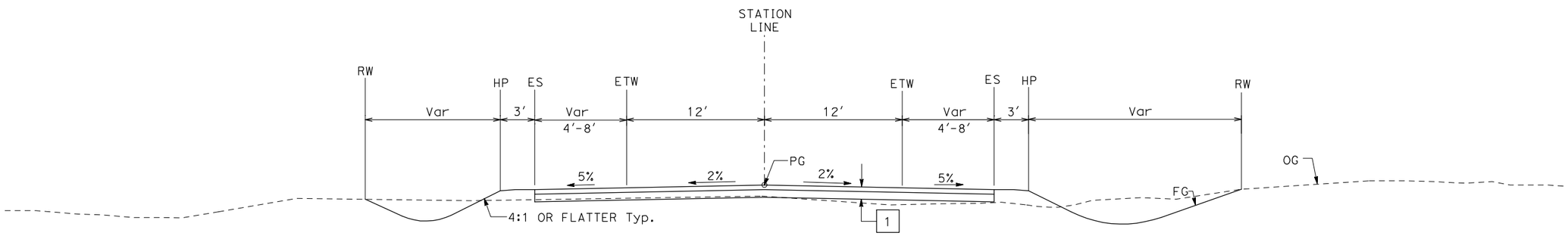
1 — HMA TYPE A
AB CLASS 2

2 — CAST IN PLACE / PRESTRESSED
BOX GIRDER (6' STRUCTURE DEPTH)

3 — AB CLASS 2




**UNPAVED ROAD**
SEE LAYOUT SHEETS
FOR ACTUAL WIDTHS




**2-LANE FRONTAGE ROAD**
SEE LAYOUT SHEETS
FOR ACTUAL SHOULDER WIDTHS

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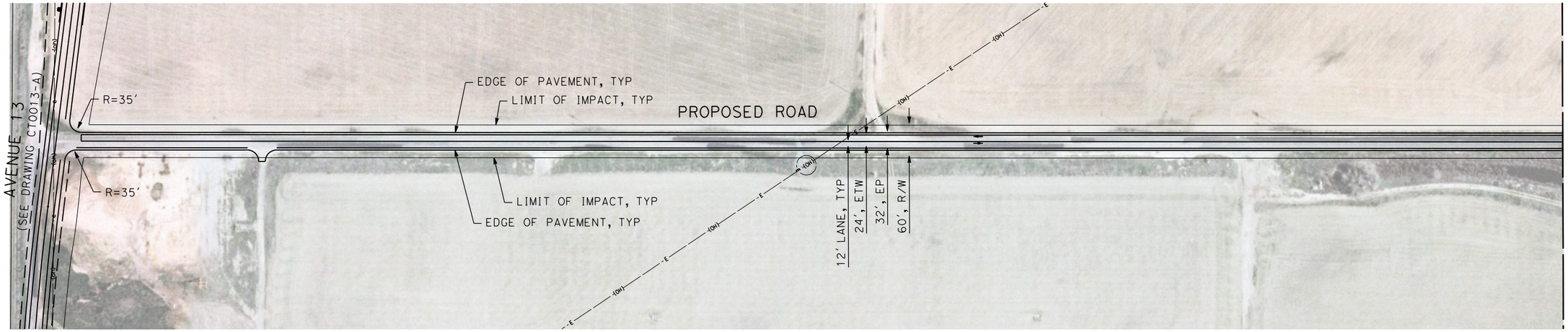
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

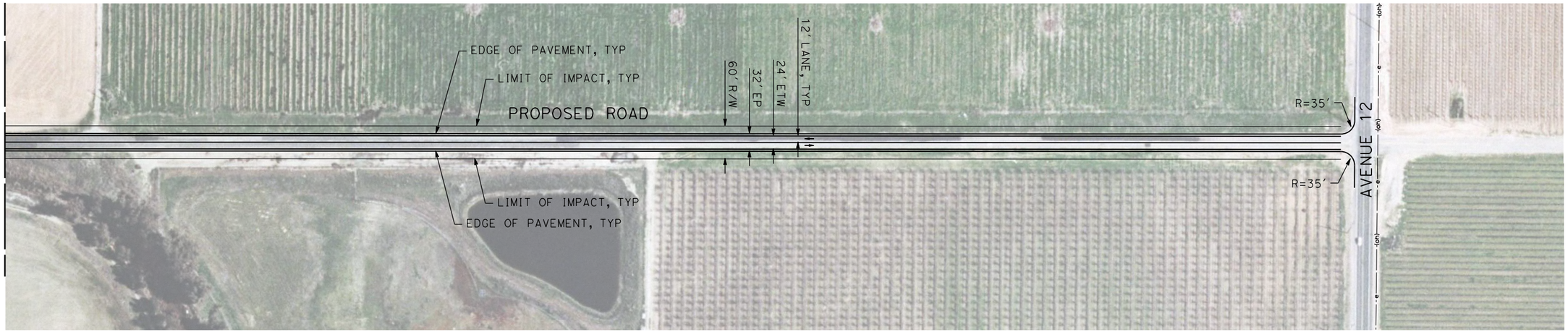
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**
BNSF - AVE 21 WYE
TYPICAL CROSS SECTIONS
LOCAL ROAD
SHEET 1 OF 1

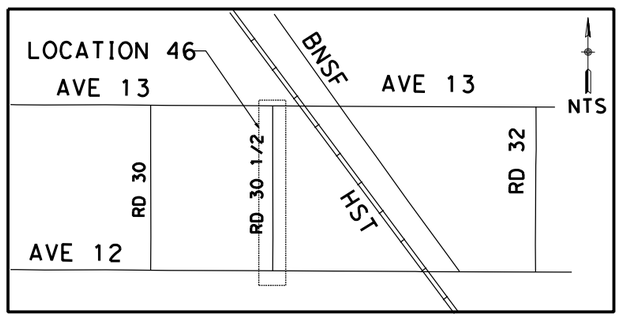
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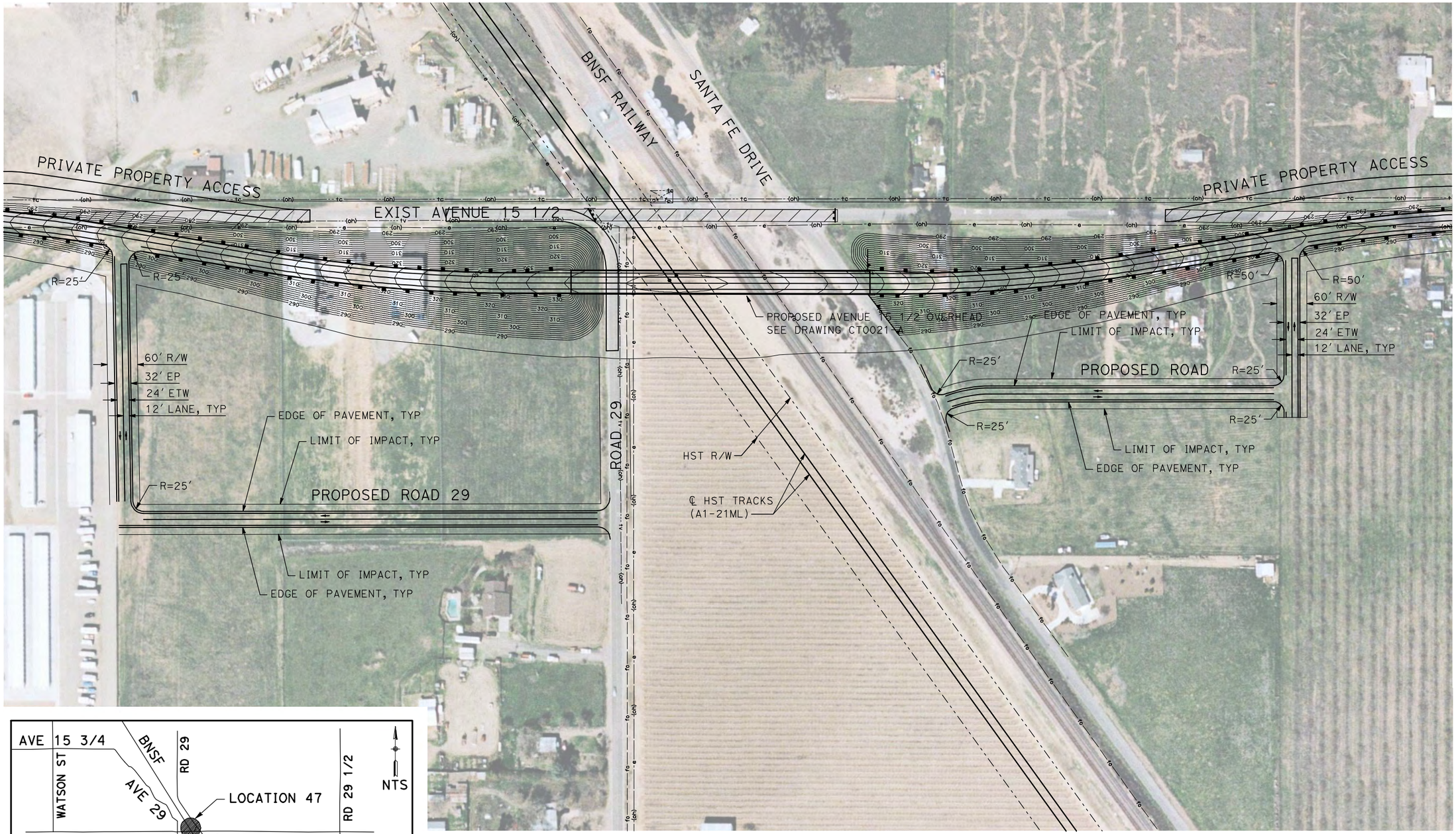
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - ROAD 30 1/2
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4000-A
SCALE AS SHOWN
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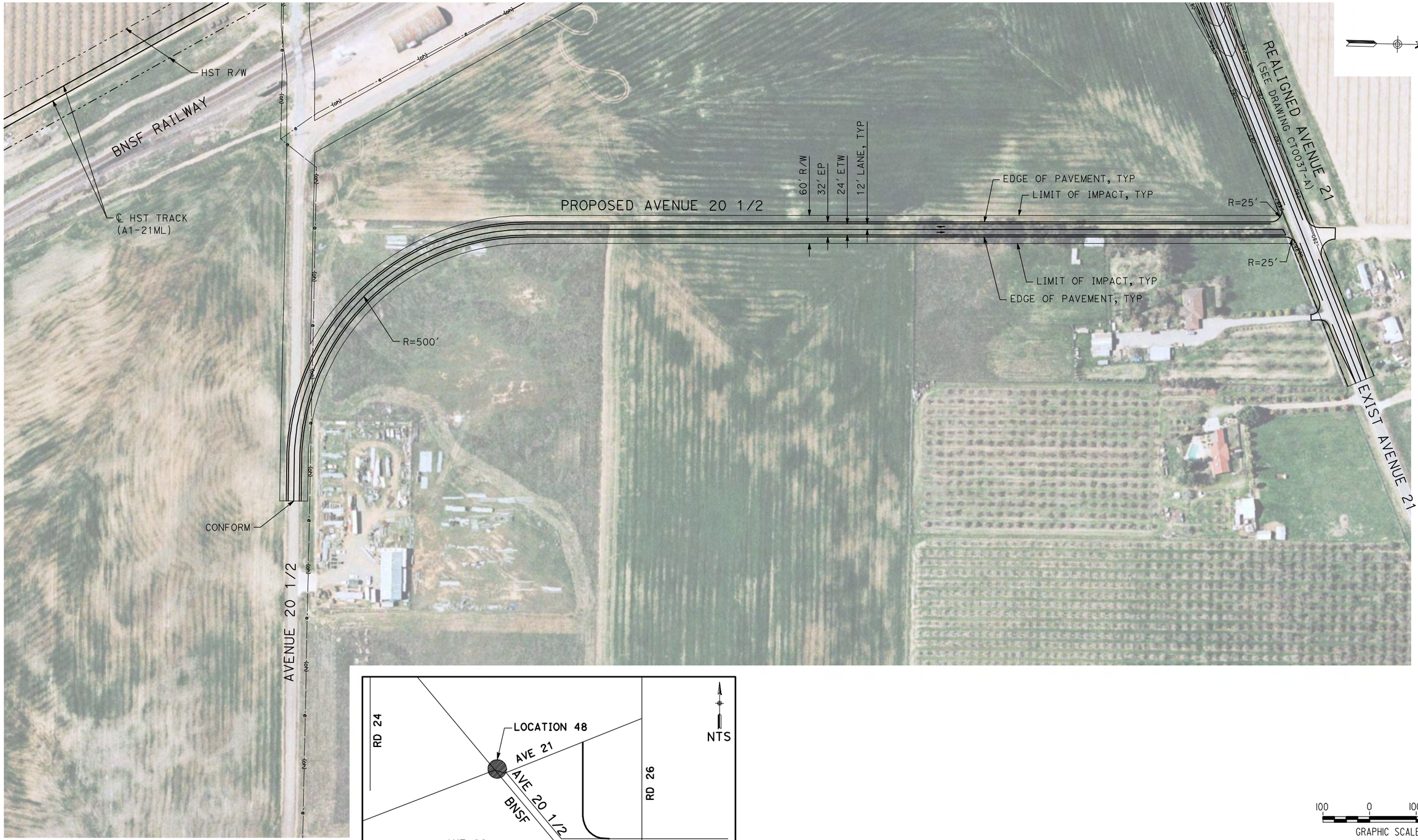
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - ROAD 29
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4001-A
SCALE AS SHOWN
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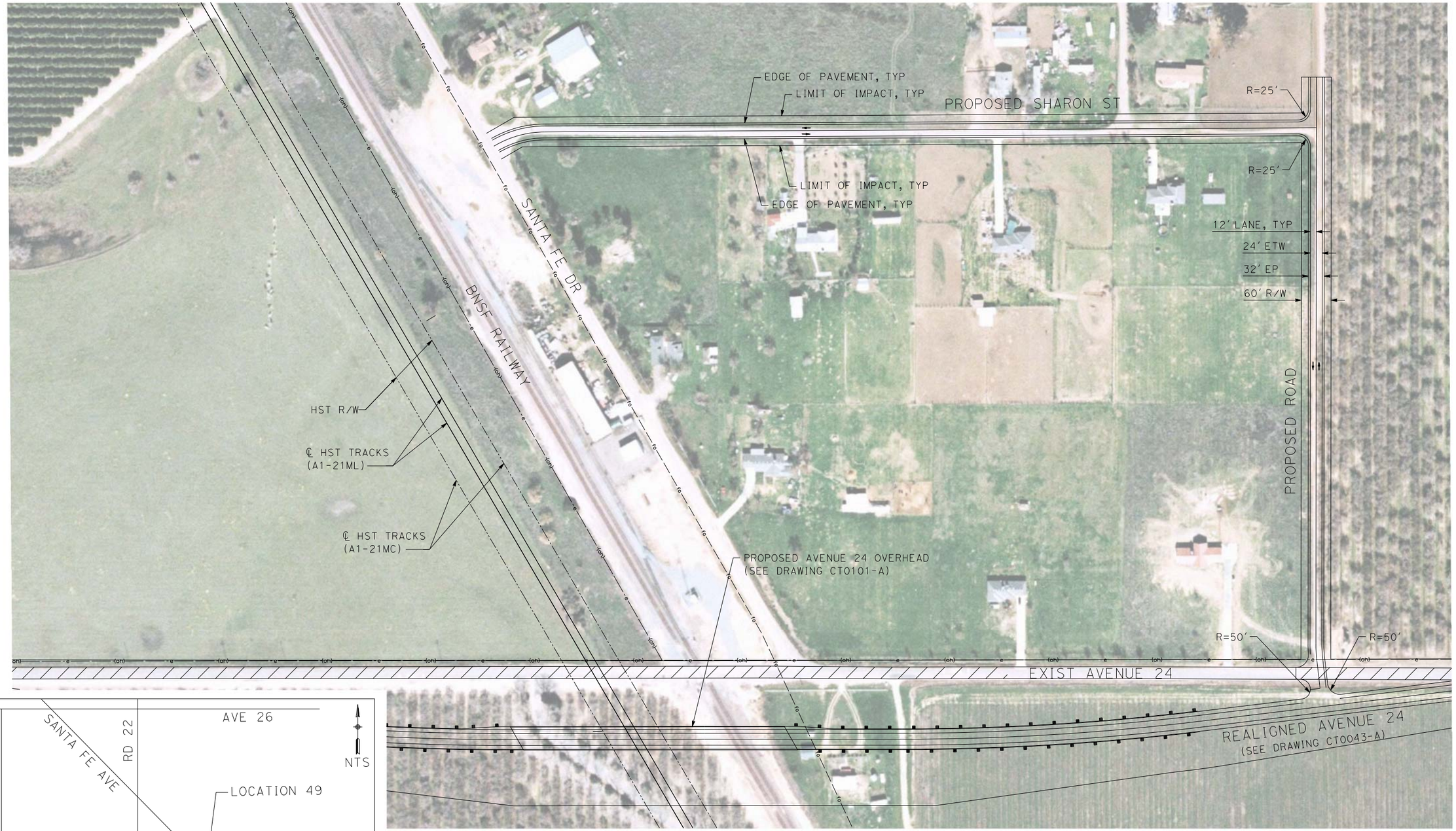
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - AVENUE 20 1/2
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4002-A
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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

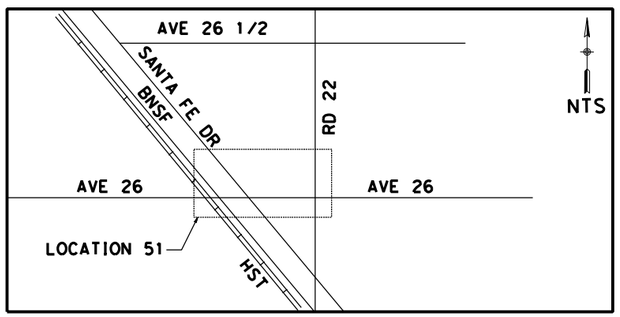
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - SHARON ST
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4003-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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gibsonr1




100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: H. PHAN
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 07/27/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
LOCAL ROAD - AVENUE 26
LAYOUT
SHEET 1 OF 2

CONTRACT NO. HST06-007
DRAWING NO. CR4005-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

MATCH LINE
SEE DRAWING CR4005-A

60' R/W
32' EP
24' ETW
12' LANE, TYP

EDGE OF PAVEMENT, TYP
LIMIT OF IMPACT, TYP

PROPOSED SANTA FE DR

CONFORM

BNSF RAILWAY

LIMIT OF IMPACT, TYP
EDGE OF PAVEMENT, TYP

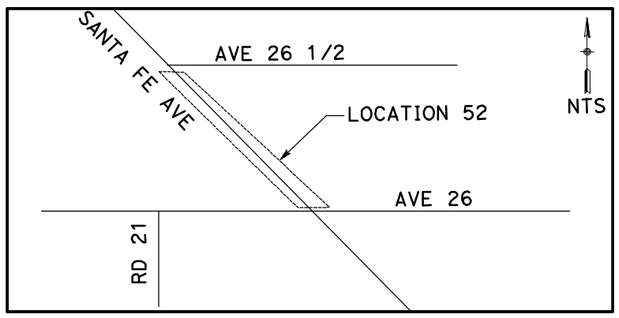
HST R/W

℄ HST TRACKS
(A1-21ML)

HST R/W

PROPOSED ROAD
(SEE DRAWING CT4004-A)

ROAD 22




100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
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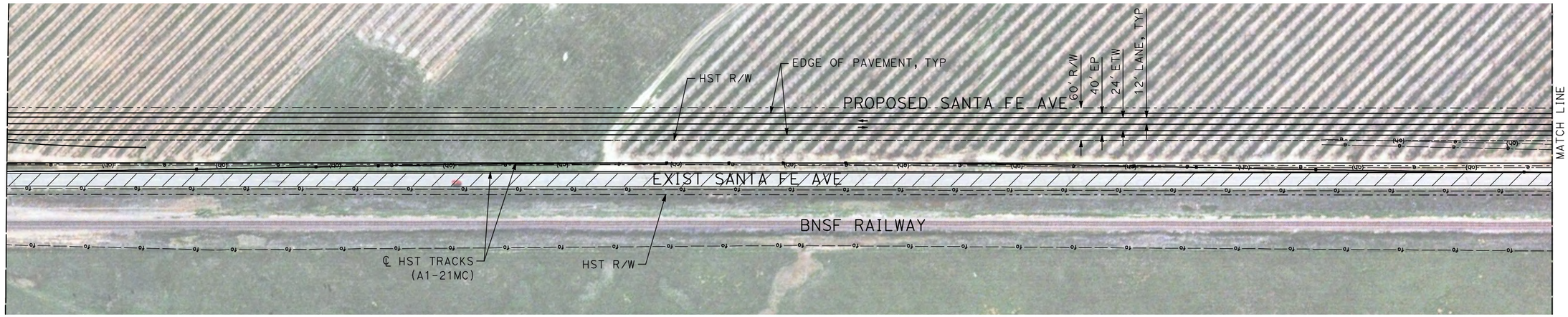
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Sacramento, CA 95811
CH2MHILL

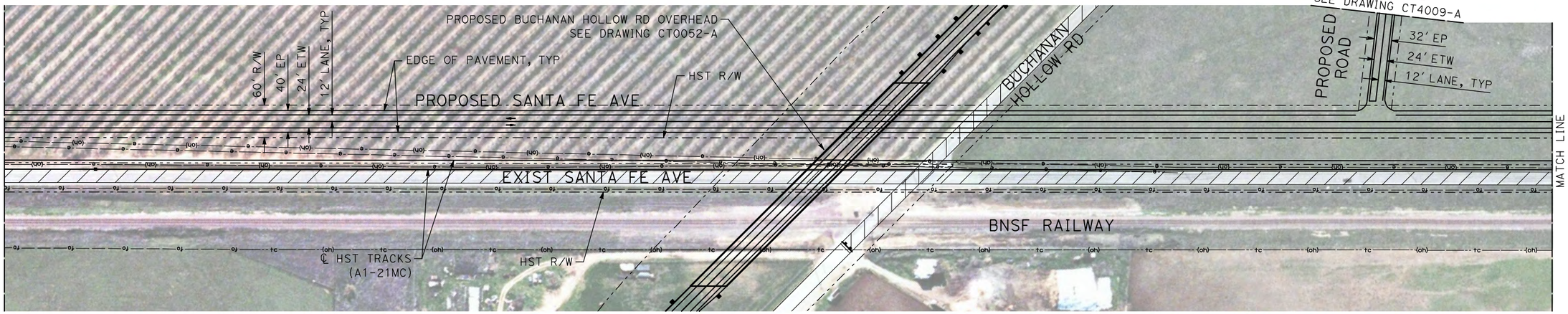
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

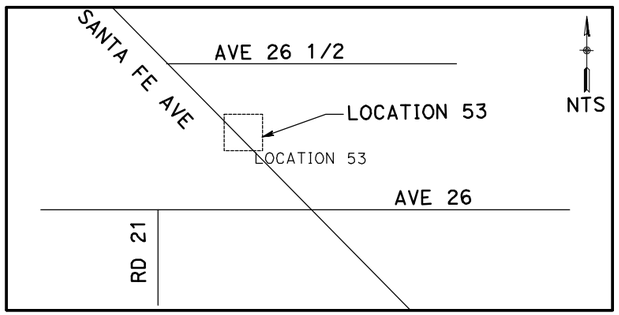
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

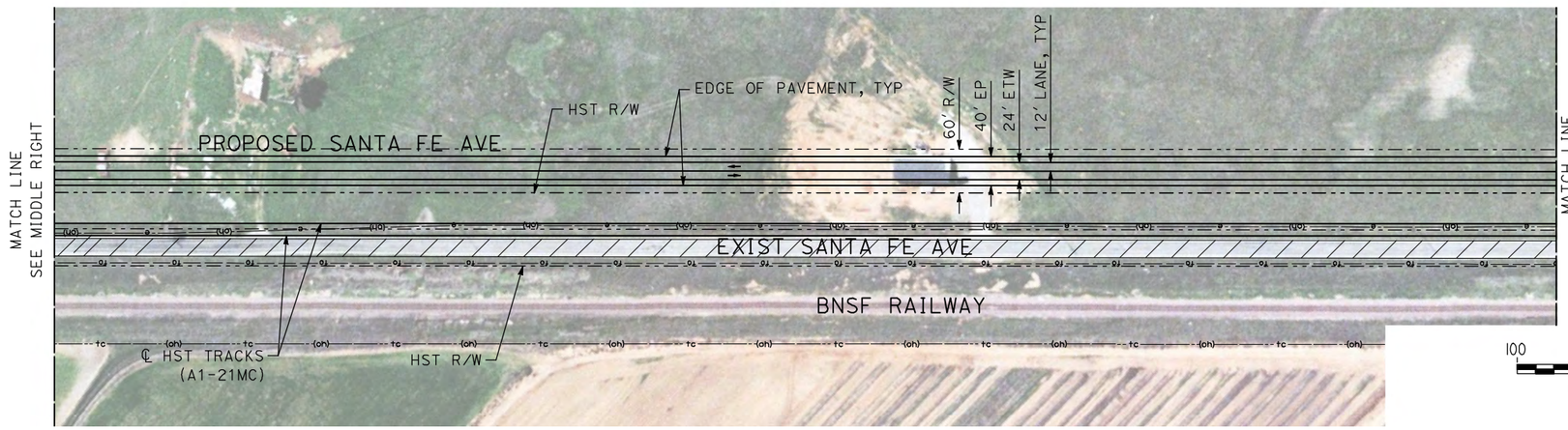
BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - SANTA FE DR
LAYOUT
SHEET 2 OF 2

CONTRACT NO. HST06-007
DRAWING NO. CR4006-A
SCALE
SHEET NO. ### OF ###




| REV | DATE | BY | CHK | APP | DESCRIPTION |
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IN CHARGE: A. BOONE
DATE: 04/29/2011

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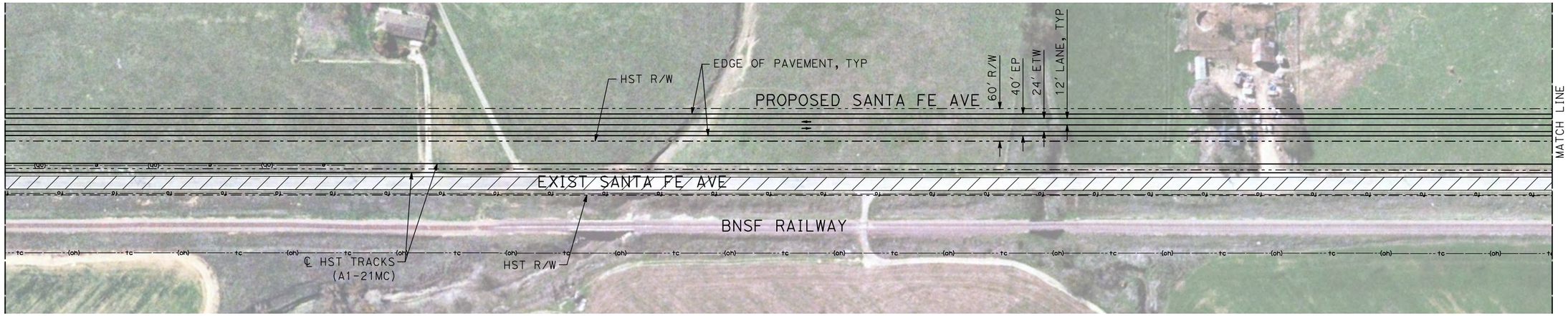
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

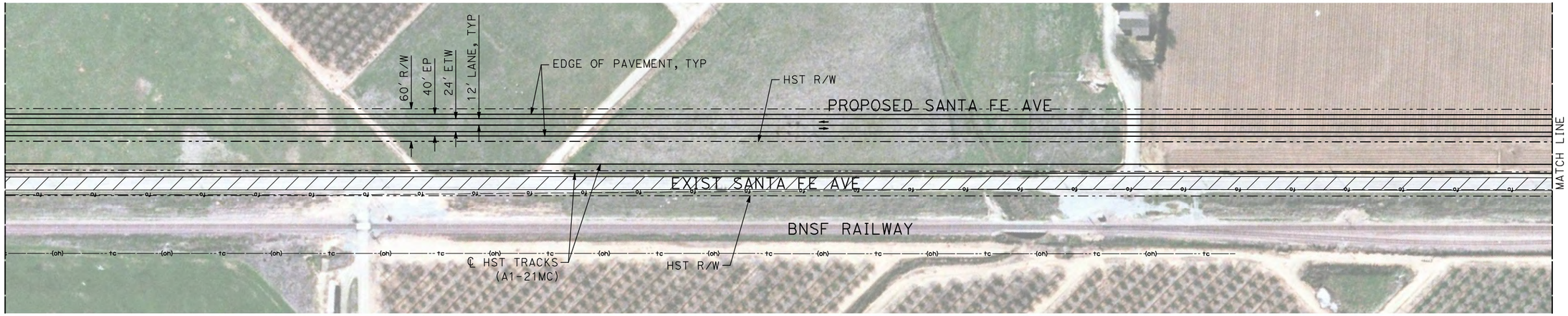
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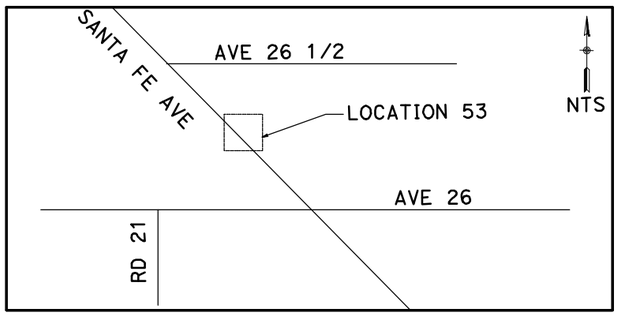
BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - SANTA FE AVE
LAYOUT
SHEET 1 OF 3

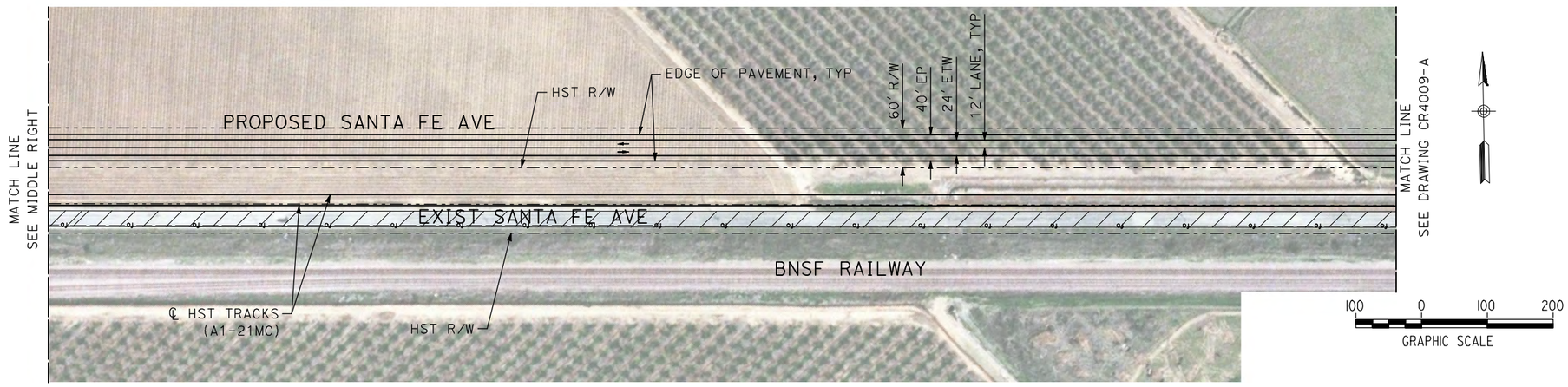
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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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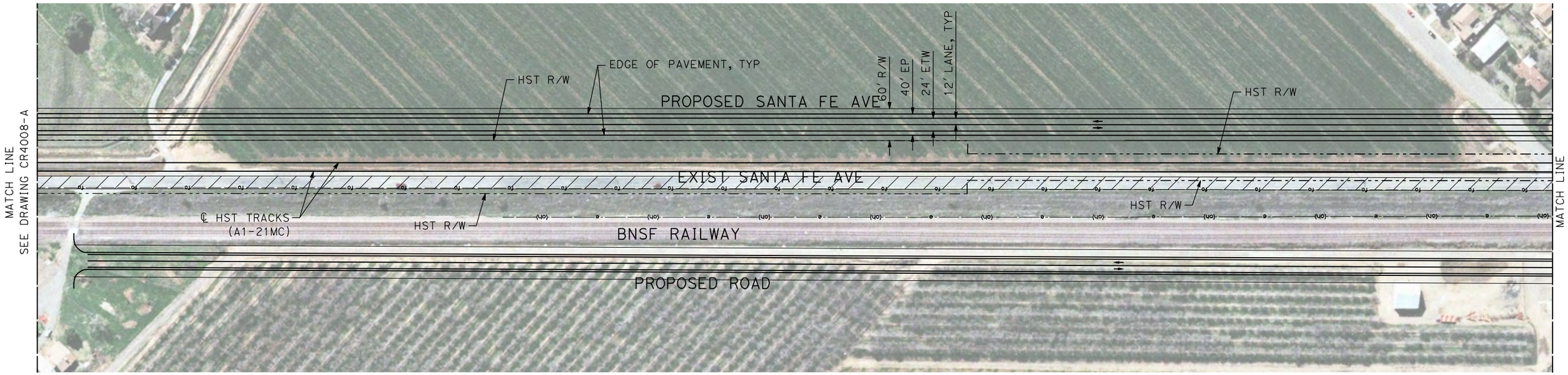
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

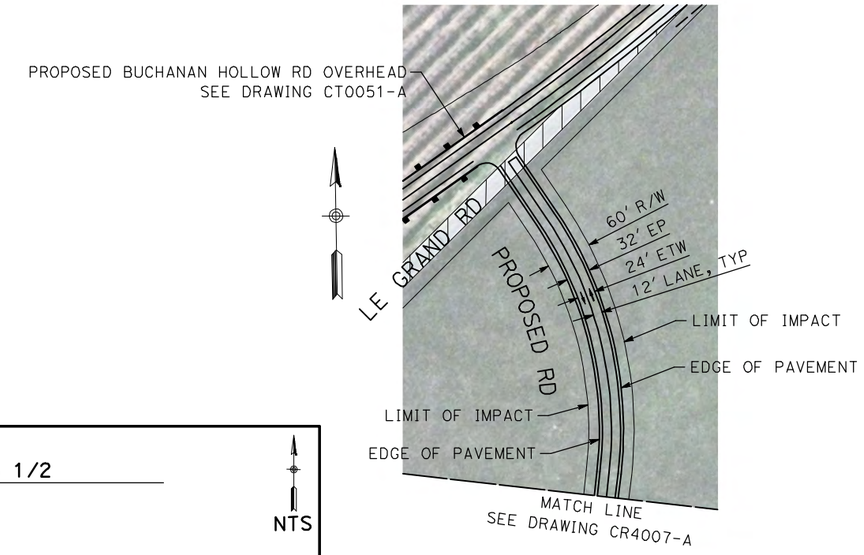
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

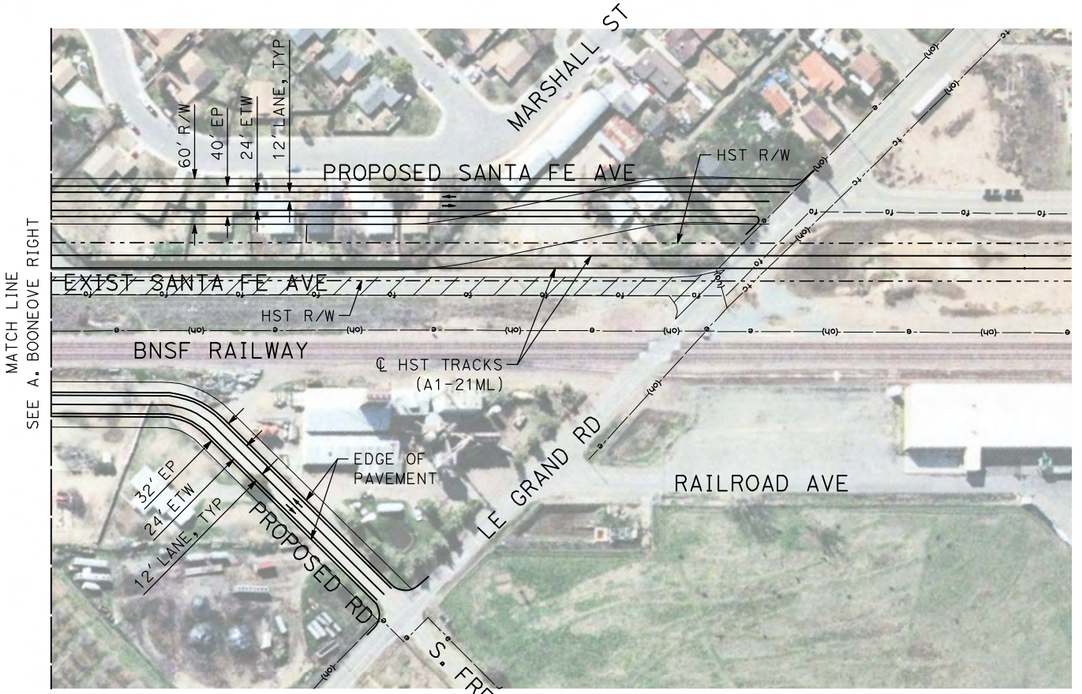
BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - SANTA FE AVE
LAYOUT
SHEET 2 OF 3

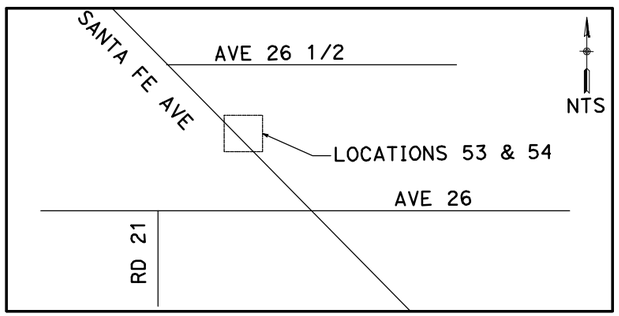
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DRAWING NO. CR4008-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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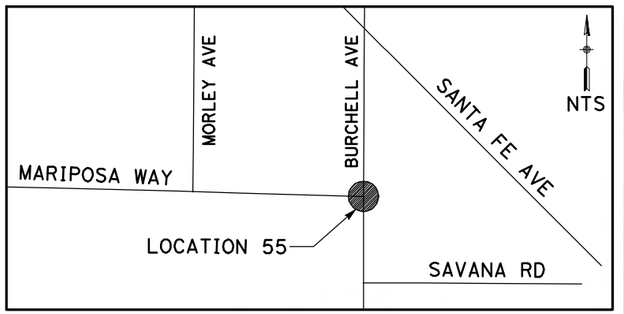
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - SANTA FE AVE
LAYOUT
SHEET 3 OF 3

CONTRACT NO. HST06-007
DRAWING NO. CR4009-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




EDGE OF PAVEMENT, TYP
LIMIT OF IMPACT, TYP
PROPOSED ROAD
LIMIT OF IMPACT, TYP
EDGE OF PAVEMENT, TYP
60' R/W
32' EP
24' ETW
12' LANE, TYP

60' R/W
32' EP
24' ETW
12' LANE, TYP
PROPOSED ROAD

MARIPOSA WAY

℄ HST TRACKS
(A1-21ML)

HST R/W

PROPOSED BURCHELL AVE OVERHEAD
SEE DRAWING CT0055-A

HST R/W

EXIST BURCHELL AVE

BURCHELL AVE
(SEE DRAWING CT0054-A)

100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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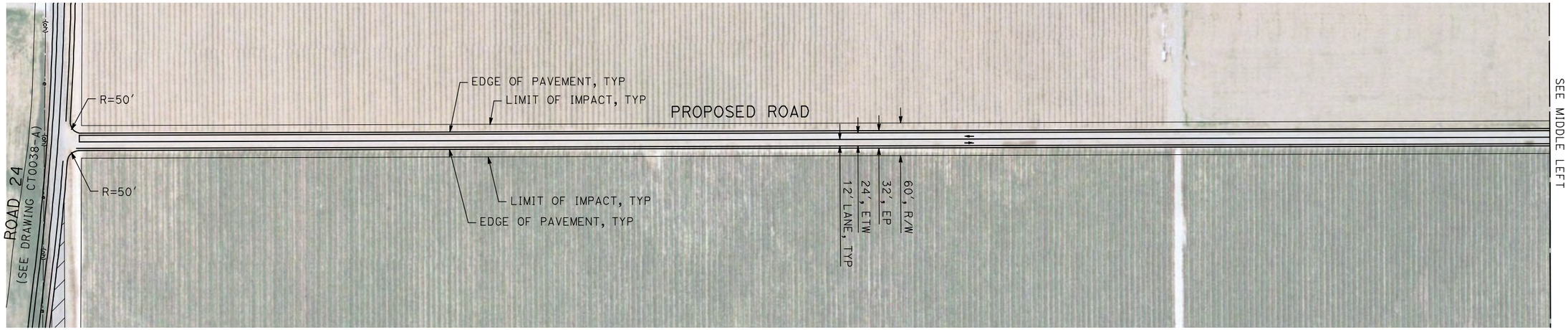
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

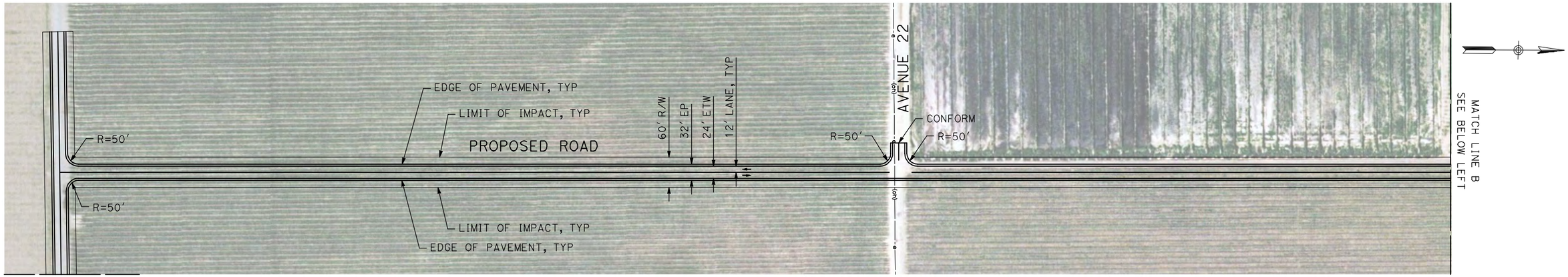
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

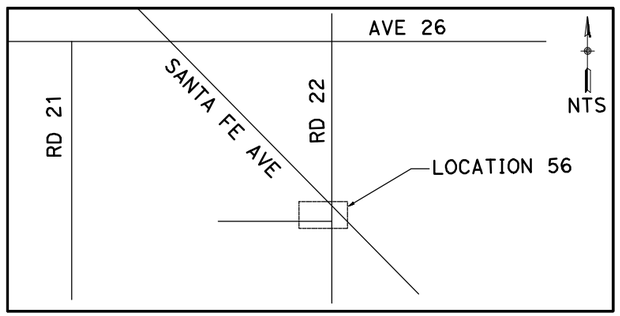
BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - BURCHELL AVE
LAYOUT
SHEET 1 OF 1

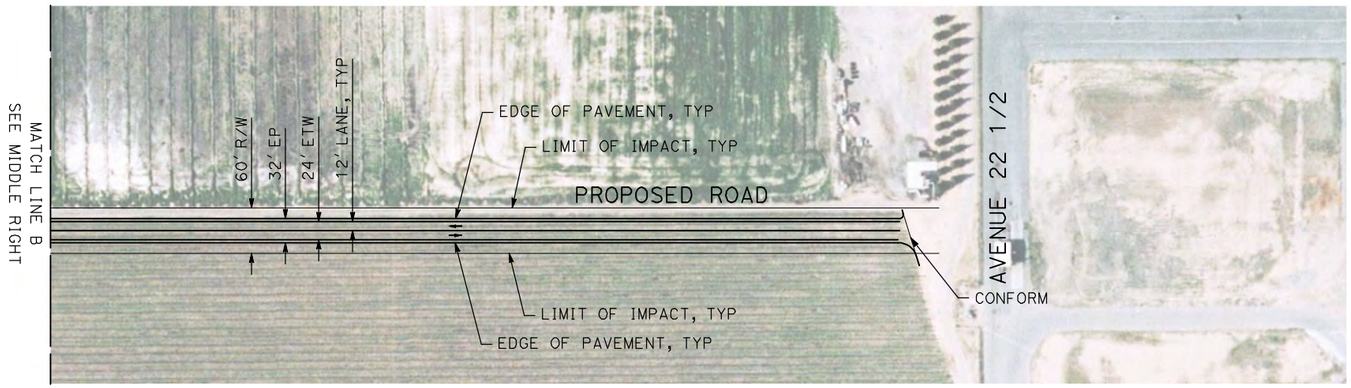
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DRAWING NO. CR4010-A
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GibsonR1




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GRAPHIC SCALE

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CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

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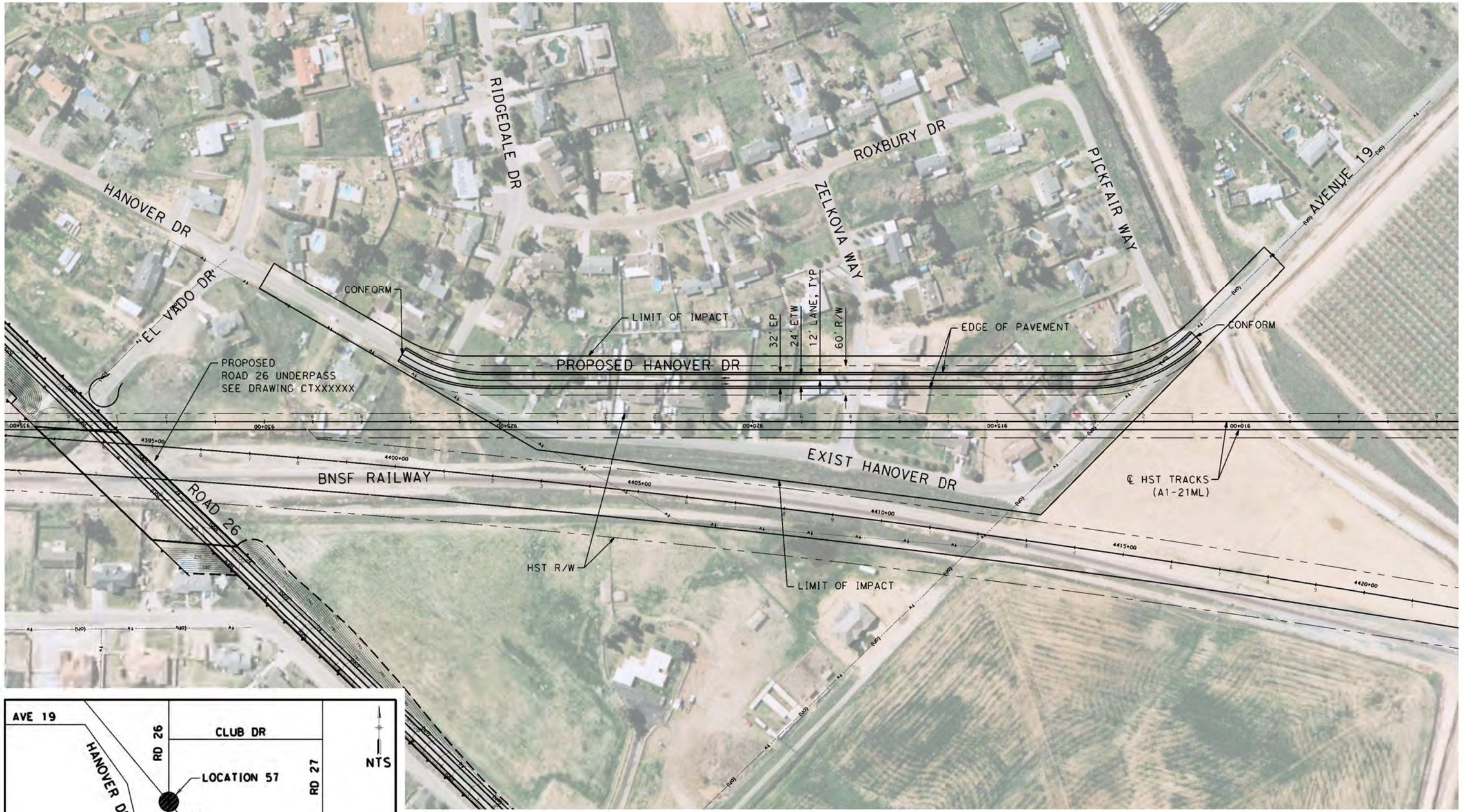
AECOM Technical Services, Inc.
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO
BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - ROAD 24
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4011-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GRAPHIC SCALE

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - (AVE 21 WYE)
LOCAL ROAD - HANOVER DR
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4012-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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lros

AVENUE 20 1/2
(SEE DRAWING CT0069-A)

PROPOSED AVENUE 20 1/2 OVERHEAD
SEE DRAWING CT0070-A

EXIST AVENUE 20 1/2

HST R/W

℄ HST TRACKS
(A1-21ML)

HST R/W

ROAD 24

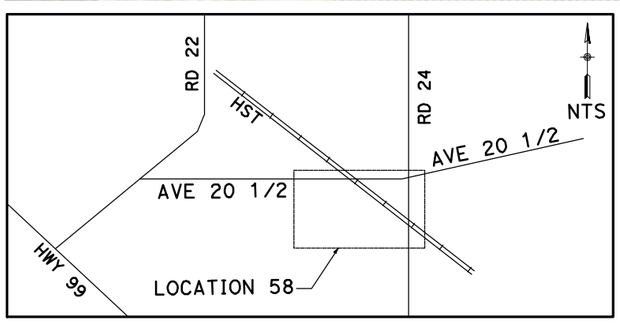
60' R/W
32' EP
24' ETW
12' LANE, TYP

PROPOSED ROAD

EDGE OF PAVEMENT, TYP
LIMIT OF IMPACT, TYP

LIMIT OF IMPACT, TYP
EDGE OF PAVEMENT, TYP

CONFORM




100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

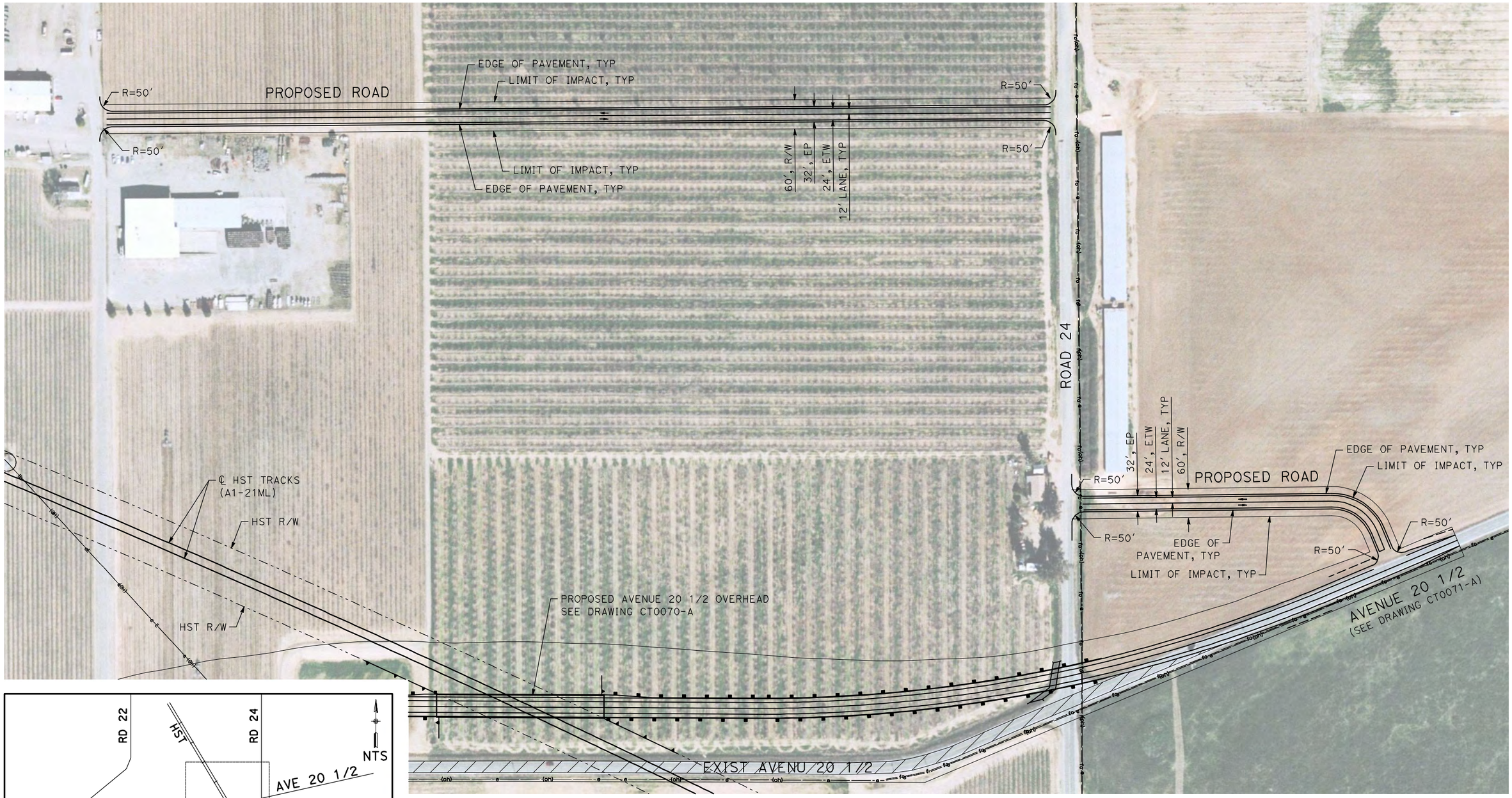
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - AVENUE 20 1/2
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4013-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1







100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

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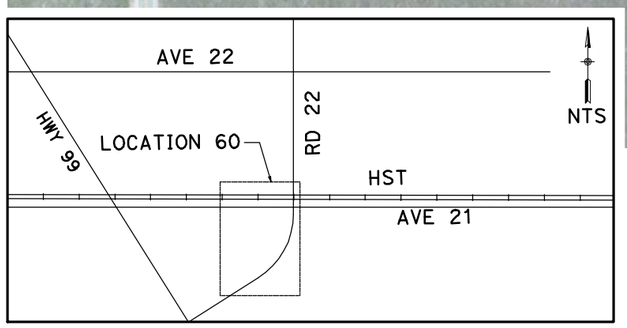
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - AVENUE 20 1/2
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4014-A
SCALE AS SHOWN
SHEET NO. ### OF ###




100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

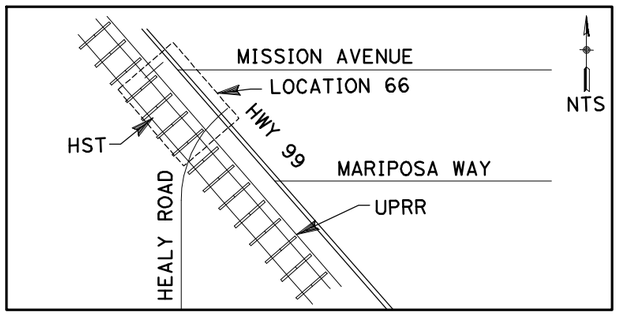
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MAIN LINE - AVE 21 WYE
LOCAL ROAD - ROAD 22
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4015-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

EXIST HEALY RD
CONFORM
LIMIT OF IMPACT
PC11+66.33
166.33'
N44°34'13"W
EXIST WEST FRONTAGE RD
STA 10+00.00
CONFORM
POB10+00.00
UPRR R/W
UPRR
PRC15+05.11
EDGE OF PAVEMENT
LIMIT OF IMPACT
REALIGNED WEST FRONTAGE RD
PT19+58.97
826.46'
N44°10'40"W
LIMIT OF IMPACT
EDGE OF PAVEMENT
MEDIAN ISLAND
℄ HST TRACKS
A1-21MC (SEE DRAWING T1229-A)
HST R/W
SR 99 SB
MATCH LINE STA 21+50
SEE DRAWING CR4017-A




50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
PROPOSED WEST FRONTAGE ROAD
LAYOUT
SHEET 1 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. CR4016-A
SCALE AS SHOWN
SHEET NO. ### OF ###

5/1/2011 12:58:10 PM I:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave21\Volume 3A - Ave 21 Wye Local Roads\Layout\MF-CR-4016-A.dgn
GibsonR1

EXIST HEALY RD

CONFORM

LIMIT OF IMPACT

EXIST WEST FRONTAGE RD

STA 10+00.00
CONFORM

POB10+00.00

PC11+66.33

166.33'
N44°34'13"W

UPRR R/W

UPRR

PRC15+05.11

EDGE OF PAVEMENT

LIMIT OF IMPACT

REALIGNED WEST FRONTAGE RD

PT19+58.97

826.46'
N44°39'11"W

MATCH LINE STA 21+50
SEE DRAWING CR4016R-A

℄ HST TRACKS
A1-21MC (SEE DRAWING T1229-A)

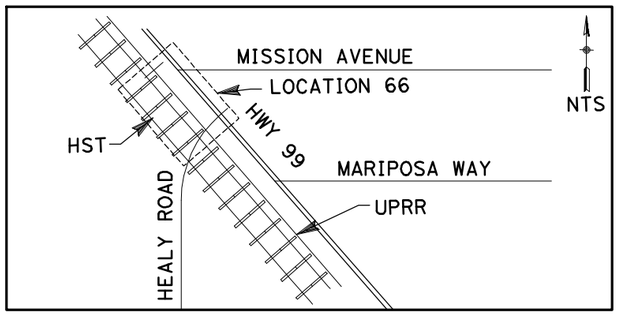
HST R/W

SR 99 SB

MEDIAN ISLAND

LIMIT OF IMPACT

EDGE OF PAVEMENT




50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

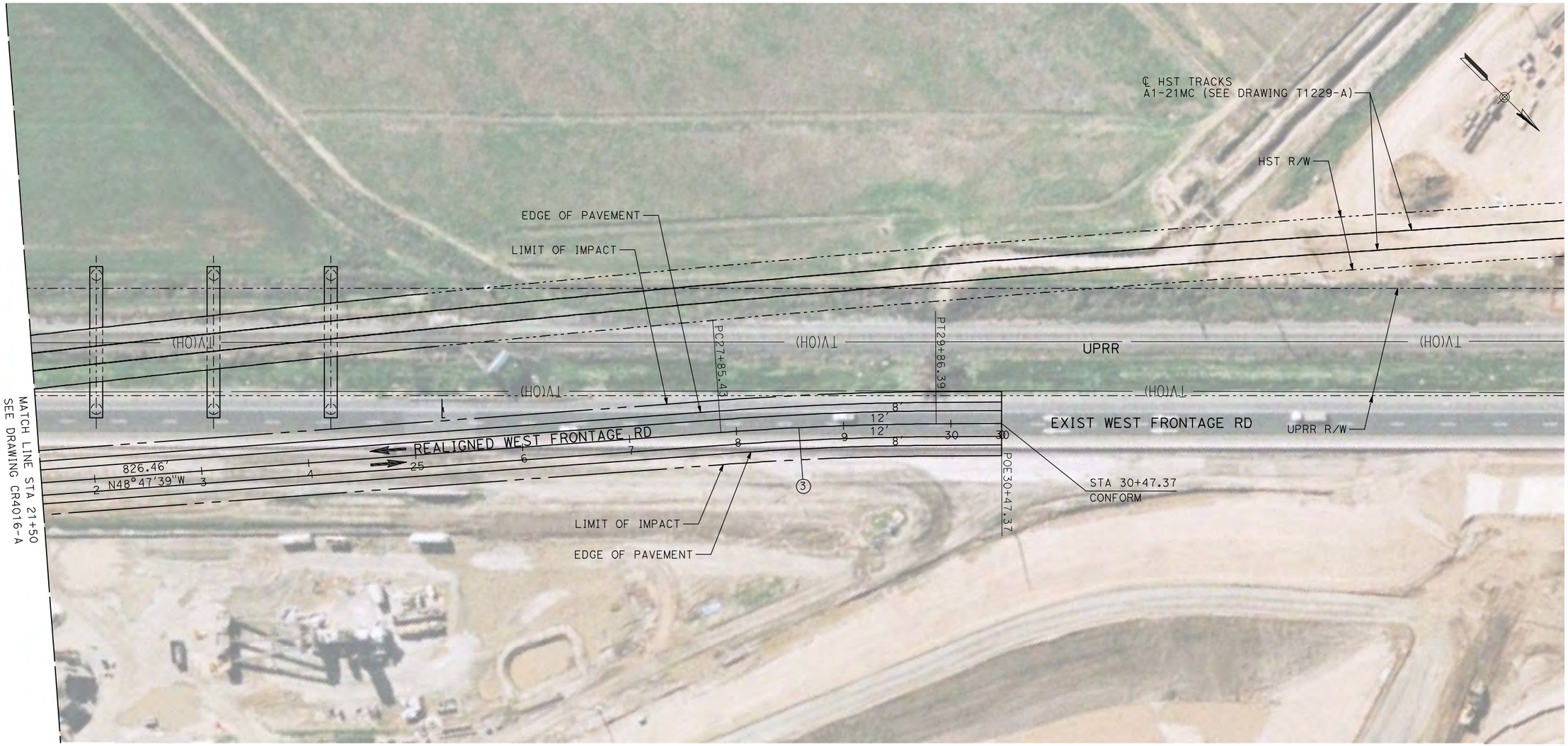
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

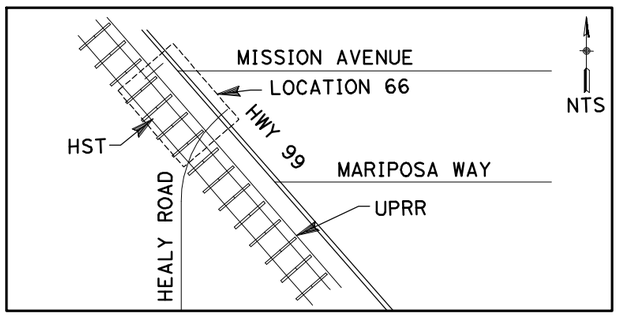
BNSF MERCED CONNECTION - AVE 21 WYE
PROPOSED WEST FRONTAGE ROAD
LAYOUT
SHEET 1 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. CR4016R-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. LI
DRAWN BY: A. TRINH
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

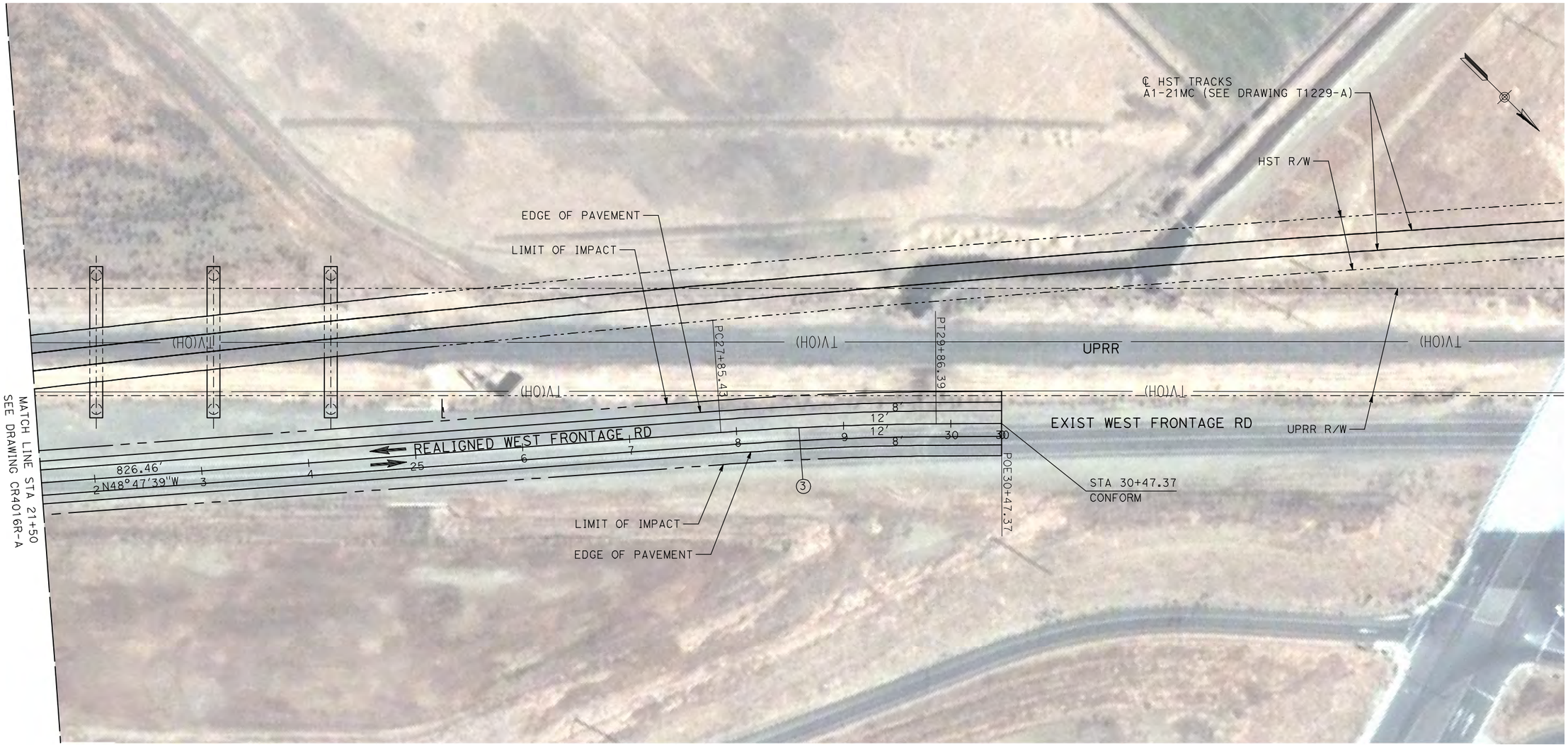
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

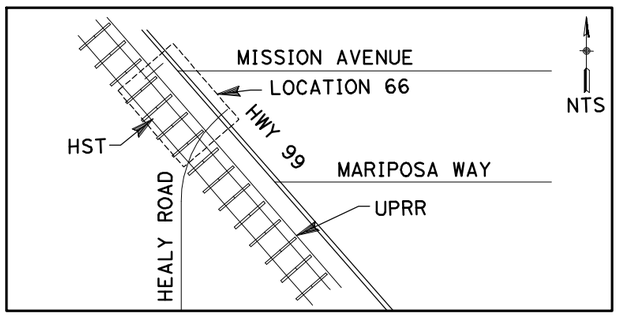
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
PROPOSED WEST FRONTAGE ROAD
LAYOUT
SHEET 2 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. CR4017-A
SCALE AS SHOWN
SHEET NO. ### OF ###




50 0 50 100
1"=50'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

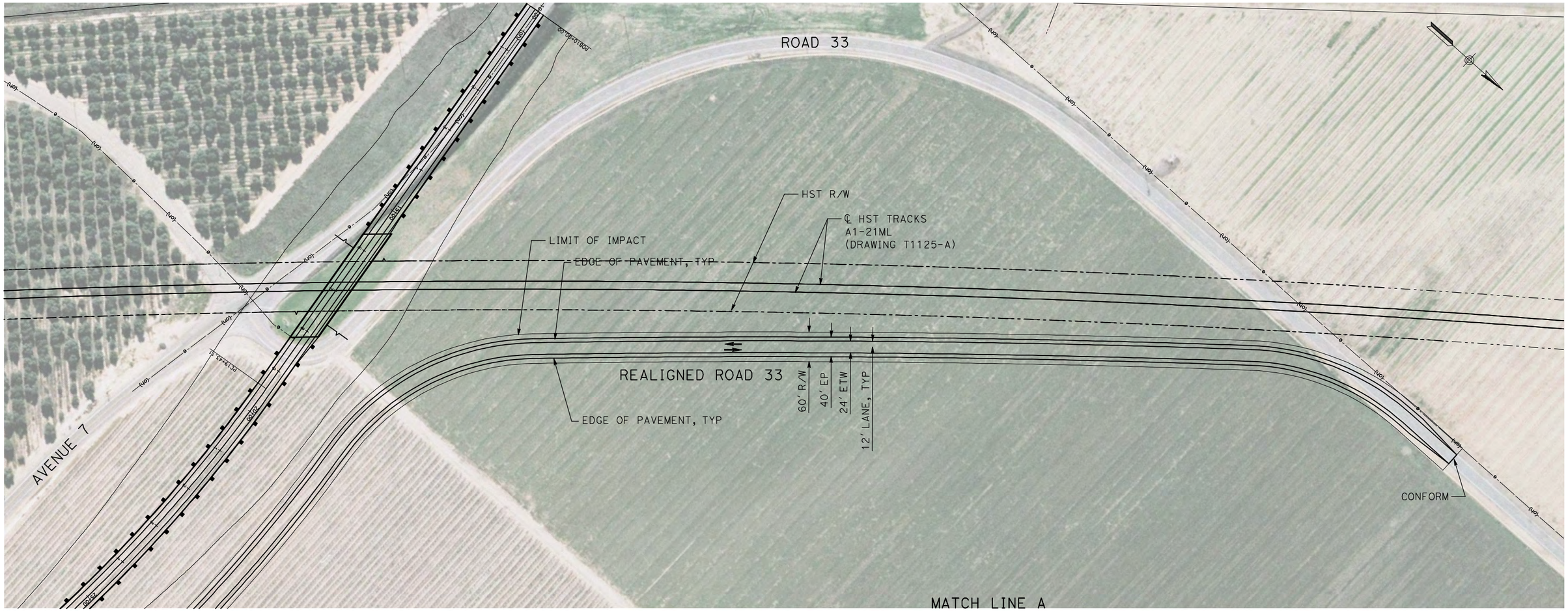
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

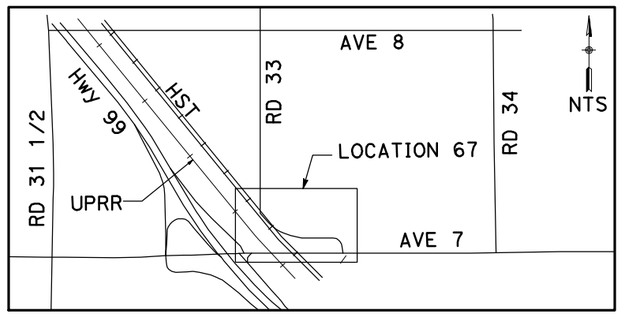
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
PROPOSED WEST FRONTAGE ROAD
LAYOUT
SHEET 2 OF 2

CONTRACT NO. HSR06-007
DRAWING NO. CR4017R-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1







100 0 100 200
GRAPHIC SCALE

BNSF MERCED CONNECTION - AVE 21 WYE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**MERCED TO FRESNO**

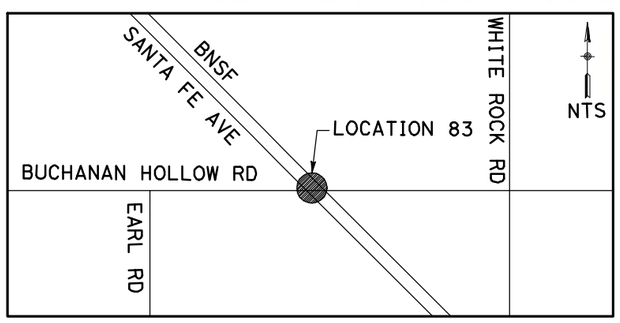
LOCAL ROAD - ROAD 33
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4018-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1

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GibsonR1




| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: H. PHAN
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

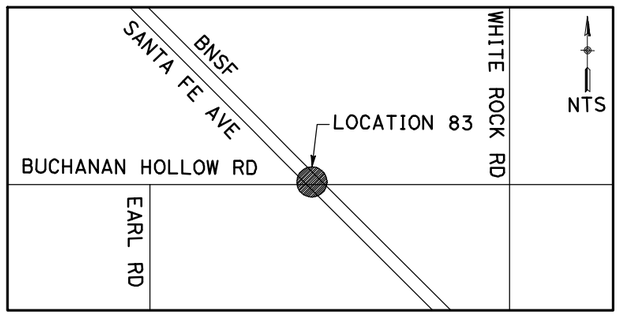
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21
LOCAL ROAD - S. WHITE ROCK RD
LAYOUT
SHEET 1 OF 2

CONTRACT NO. HST06-007
DRAWING NO. CR4200-A
SCALE AS SHOWN
SHEET NO. ### OF ###

I:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave2124mc01\volume 3a - ave 2124 wye local roads\layout\WF-CT-4201-A.dgn
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GibsonR1




100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: H. PHAN
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

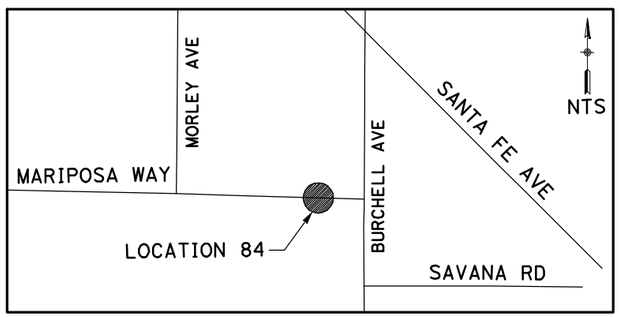
# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
LOCAL ROAD - S. WHITE ROCK RD
LAYOUT
SHEET 2 OF 2

CONTRACT NO.: HST06-007
DRAWING NO.: CR4201-A
SCALE: AS SHOWN
SHEET NO.: ### OF ###

i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\roadway\a1-ave2124mc01\volume 3a - ave 2124 wye local roads\layout\WF-CT-4202-A.dgn
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GibsonR1




| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY: R. GIBSON
DRAWN BY: H. PHAN
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

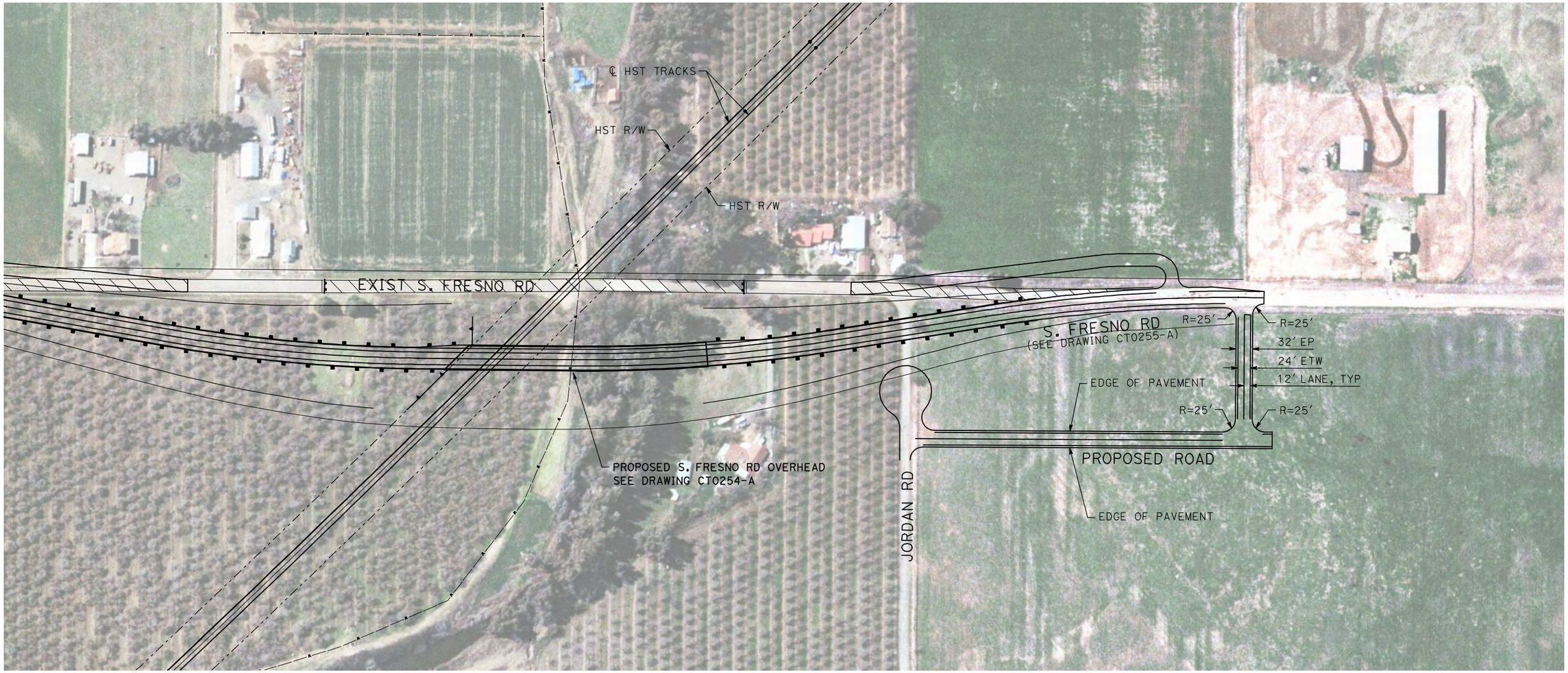
AECOM
Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

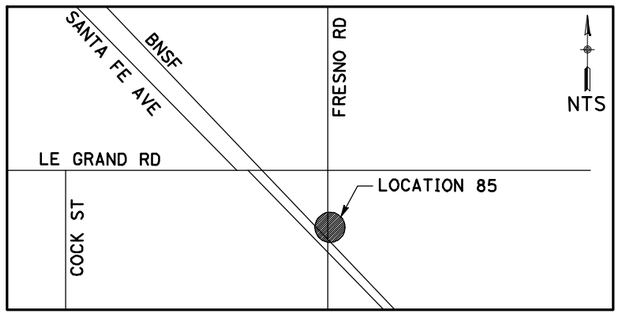
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21
LOCAL ROAD - S. BURCHELL AVE
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4202-A
SCALE AS SHOWN
SHEET NO. ### OF ###




100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY R. GIBSON
DRAWN BY H. PHAN
CHECKED BY J. ZANDIAN
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

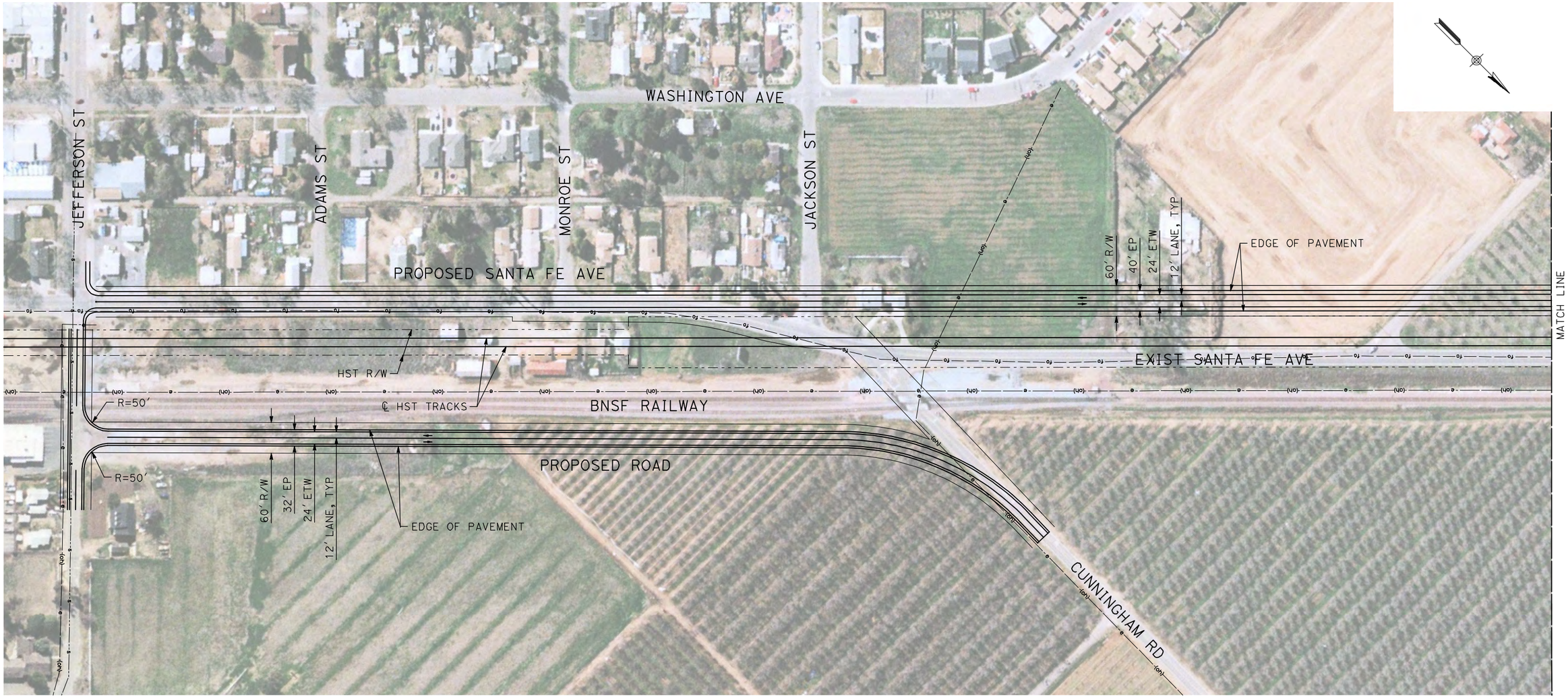
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

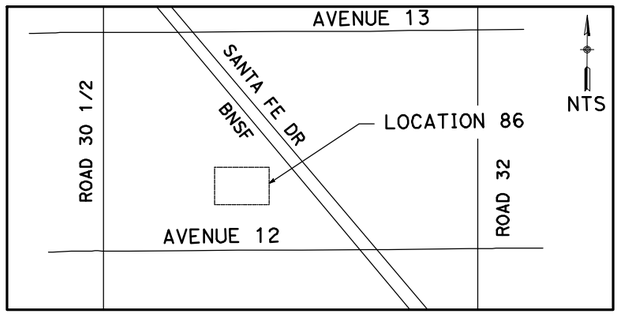
BNSF MERCED CONNECTION - AVE 21
LOCAL ROAD - S. FRESNO RD
LAYOUT
SHEET 1 OF 1

CONTRACT NO. HST06-007
DRAWING NO. CR4255-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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5/1/2011 1:19:53 PM GibsonR1




100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: H. PHAN
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

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Sacramento, CA 95811

CH2MHILL

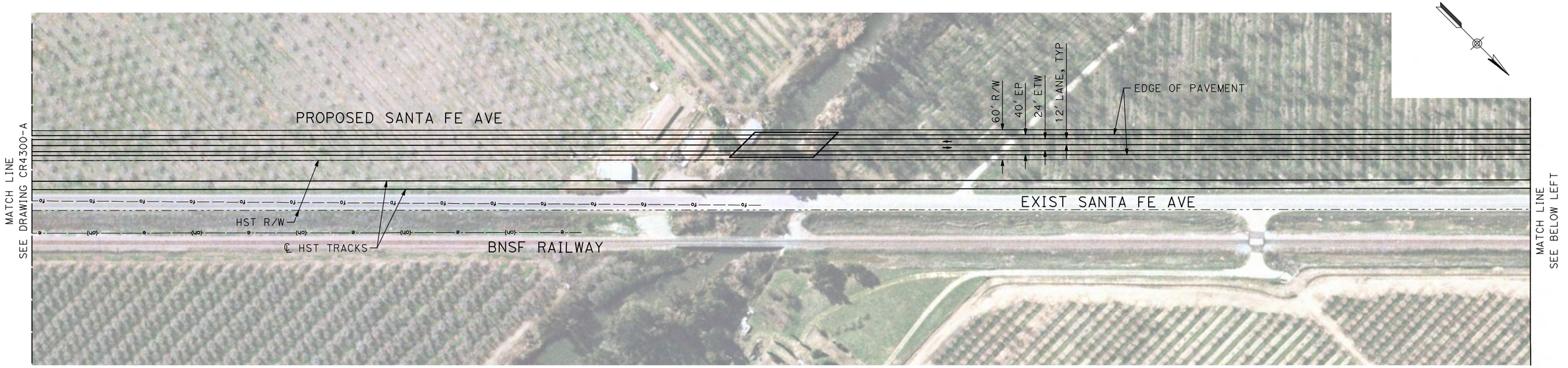
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

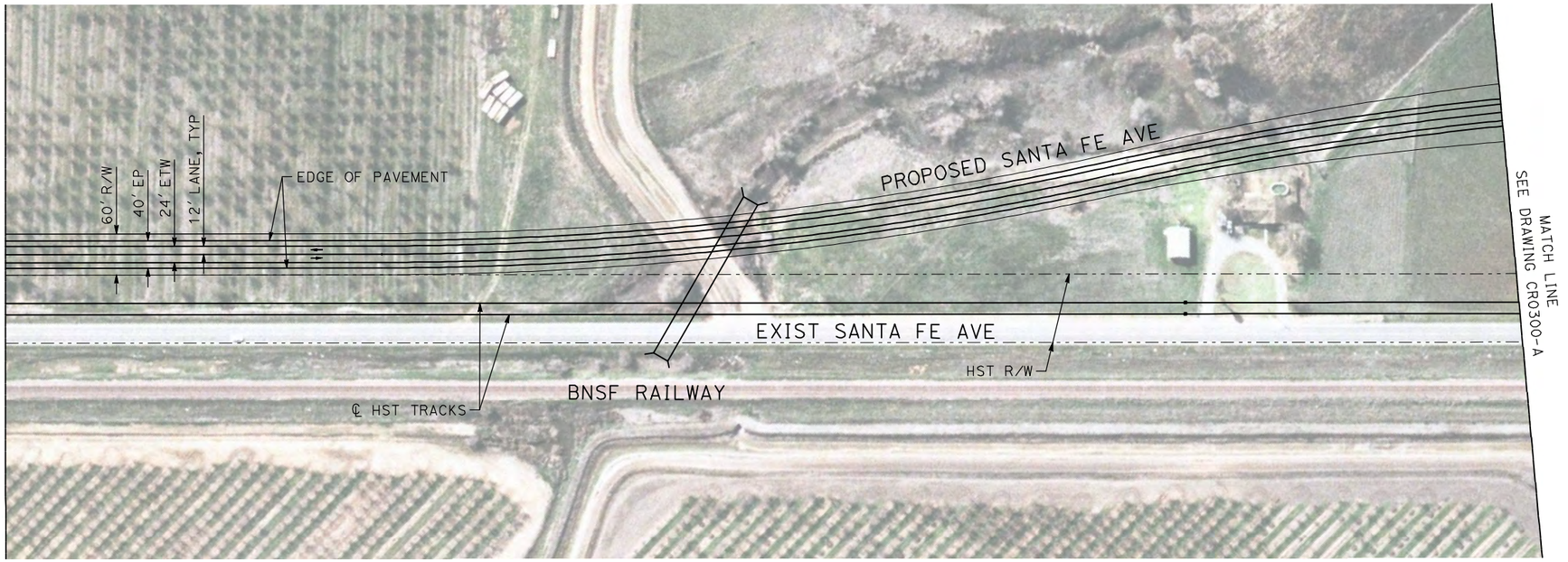
# CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

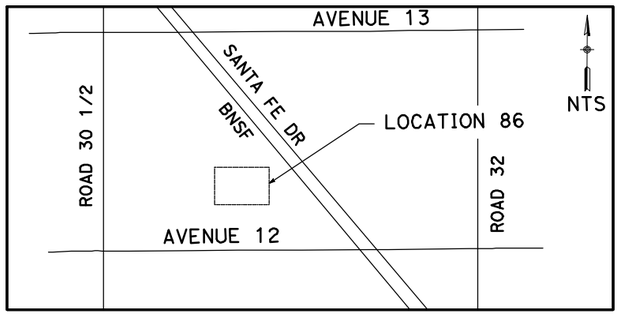
BNSF MERCED CONNECTION - AVE 21 WYE
LOCAL ROAD - S. SANTA FE AVE
LAYOUT
SHEET 1 OF 2

CONTRACT NO. HST06-007
DRAWING NO. CR4300-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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GibsonR1




100 0 100 200
GRAPHIC SCALE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: R. GIBSON
DRAWN BY: H. PHAN
CHECKED BY: J. ZANDIAN
IN CHARGE: A. BOONE
DATE: 04/29/2011

**RECORD SET**
**15% DESIGN SUBMITTAL**

**NOT FOR CONSTRUCTION**

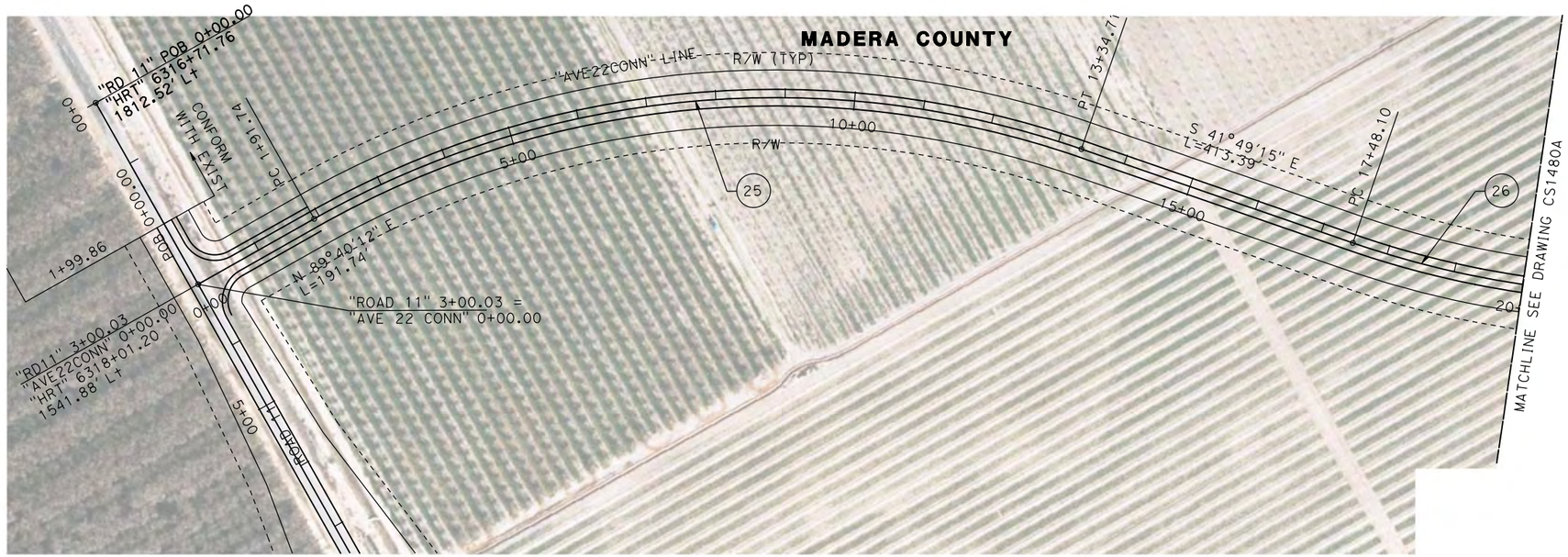
AECOM
Technical Services, Inc.
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
# MERCED TO FRESNO

BNSF MERCED CONNECTION - AVE 21 WYE
LOCAL ROAD - S. SANTA FE AVE
LAYOUT
SHEET 2 OF 2

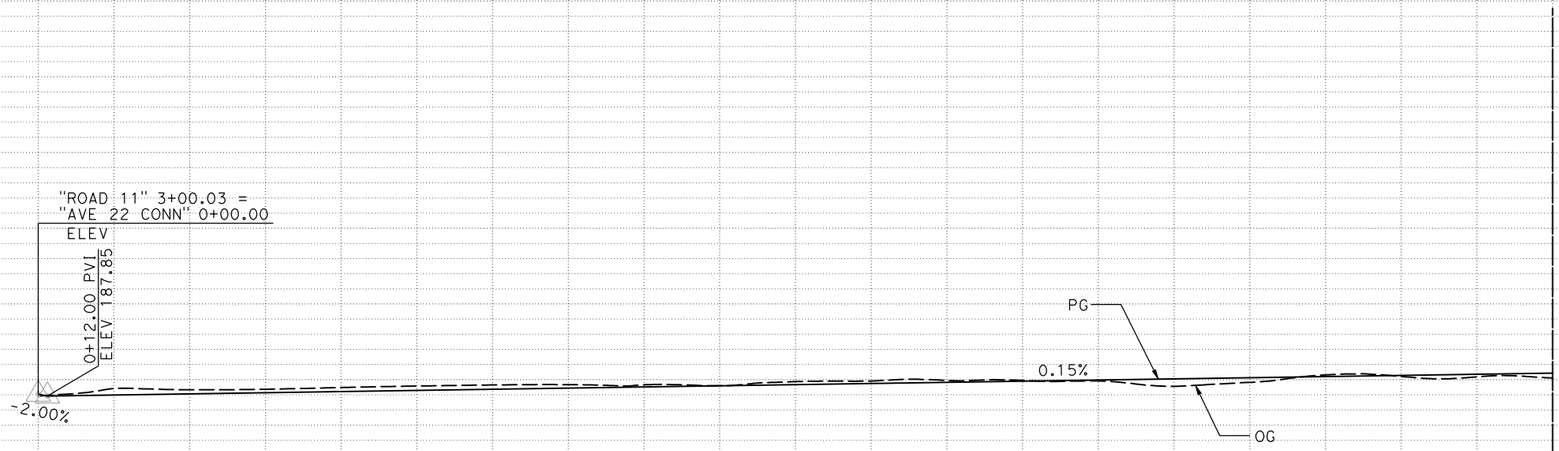
CONTRACT NO. HST06-007
DRAWING NO. CR4301-A
SCALE AS SHOWN
SHEET NO. ### OF ###




**PLAN**

10 0 10 20 — VERT: 1"=10'

100 0 100 200 — HORIZ: 1"=100'




**PROFILE "AVE22CONN" LINE**

| STATION | 0+00 | 1 | 2 | 3 | 4 | 5+00 | 6 | 7 | 8 | 9 | 10+00 | 1 | 2 | 3 | 4 | 15+00 | 6 | 7 | 8 | 9 | 20+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CY EXC | | | | | | | | | | | | | | | | | | | | | | |
| CY EMB | | | | | | | | | | | | | | | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

**15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY**

**NOT FOR CONSTRUCTION**

PARSONS

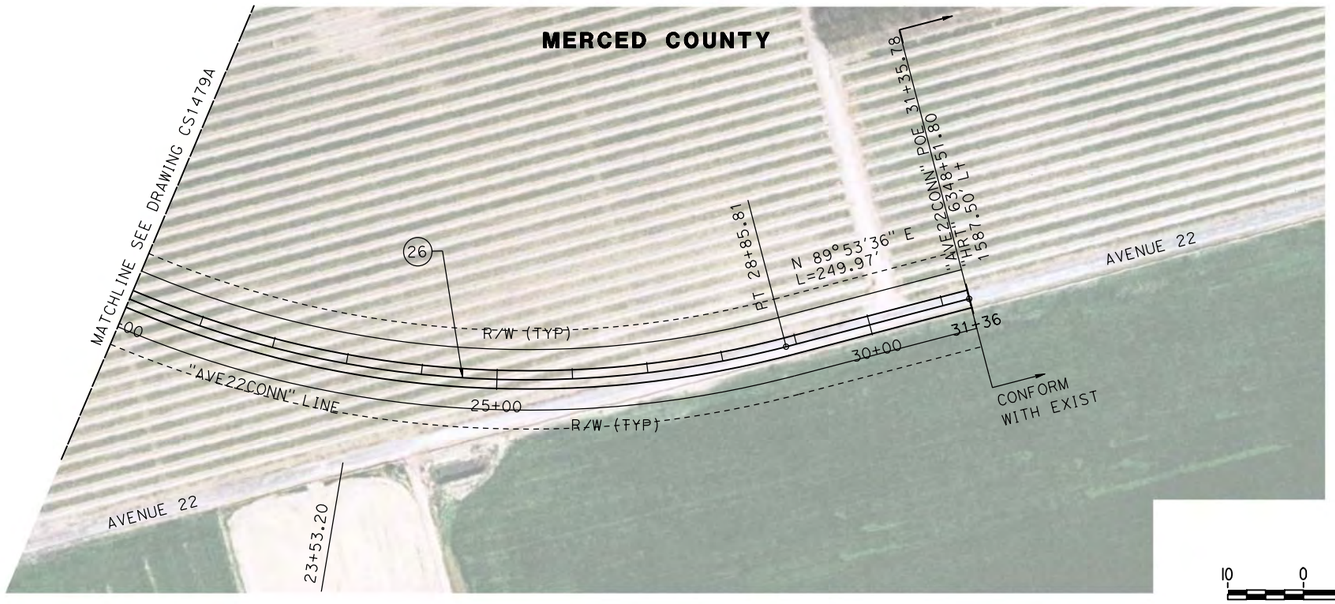
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 24/SR152/AVENUE 21
AVENUE 22 CONNECTOR TO ROAD 11
PLAN AND PROFILE

CONTRACT NO. HSR08-05
DRAWING NO. CR1479A
SCALE AS SHOWN
SHEET NO. 1 OF 2

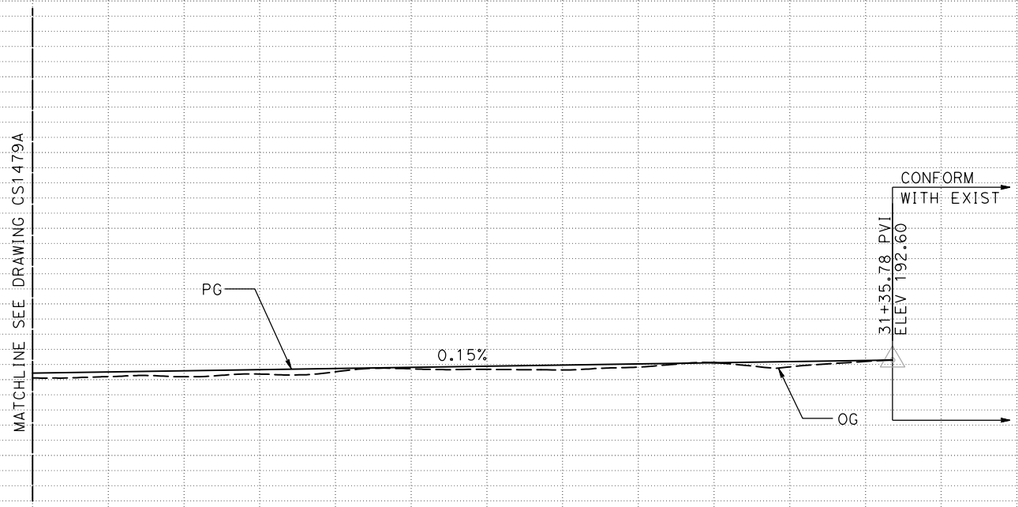
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**PLAN**

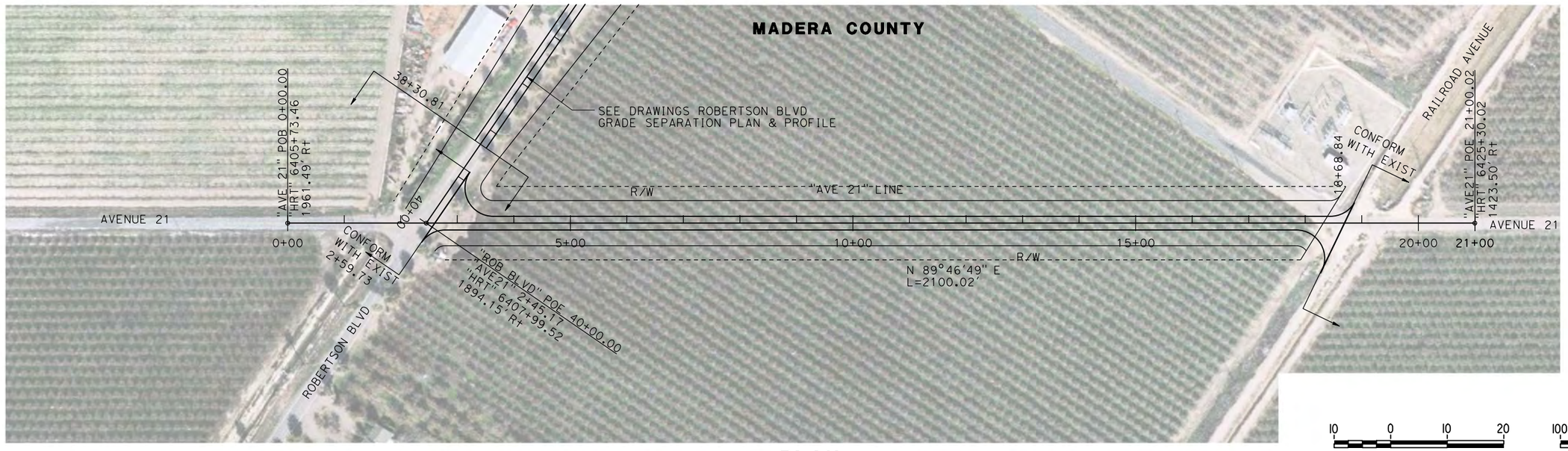
10 0 10 20
VERT: 1"=10'

100 0 100 200
HORIZ: 1"=100'




**PROFILE "AVE22CONN" LINE**

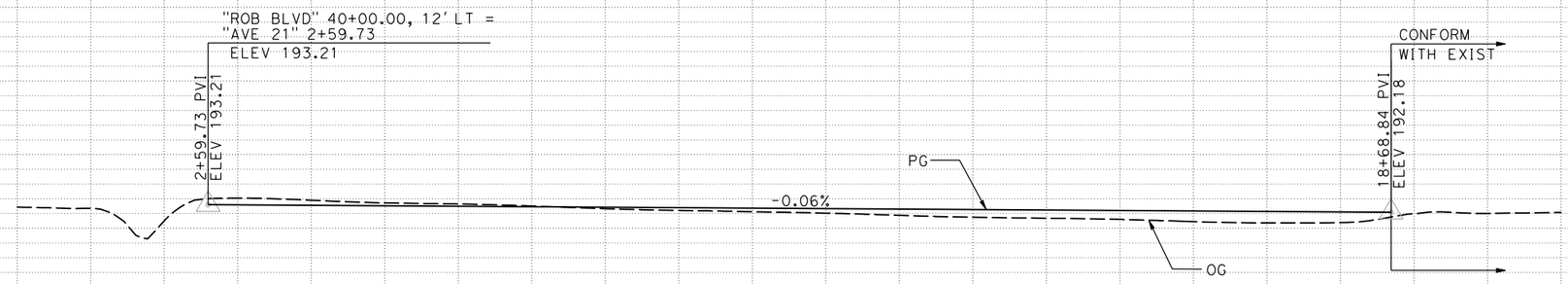
| | | |




**PLAN**

VERT: 1"=10'

HORIZ: 1"=100'




**PROFILE "AVE 21" LINE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY: P. JACOBY
DRAWN BY: ALBERT S.
CHECKED BY: RESHMA C.
IN CHARGE: D. WEMMER
DATE: 4/15/2011

**15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY**

**NOT FOR CONSTRUCTION**

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# CALIFORNIA HIGH-SPEED TRAIN PROJECT
## MERCED TO FRESNO

BNSF MAIN LINE
AVENUE 24/SR152/AVENUE 21
AVENUE 21
PLAN AND PROFILE

CONTRACT NO. HSR08-05
DRAWING NO. CR1483A
SCALE AS SHOWN
SHEET NO. 1 OF 1

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